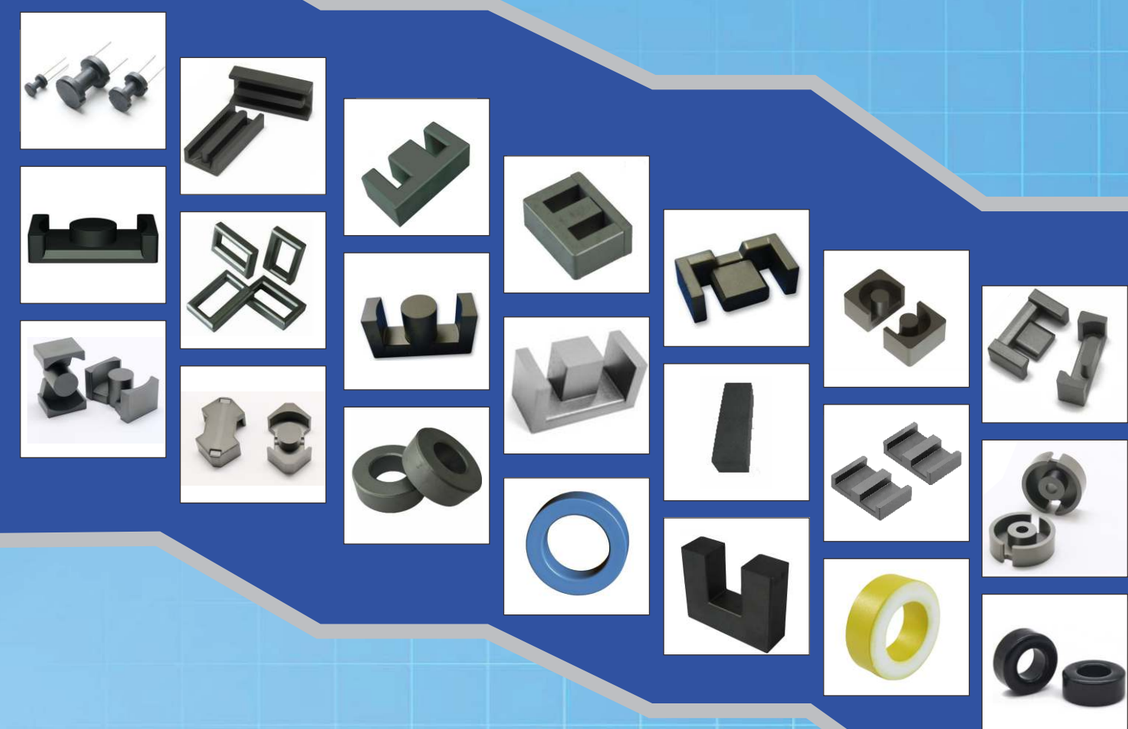
Factory: Plot No - 101 & 102, Toy City, Ecotech – III, Greater Noida, Gautam Budh Nagar – 201306, Uttar Pradesh, India.
☎ +91 120 2397117, 119 - 121. ✉: info@speedofer.com **URL**: www.speedofer.com

Speedofer
Components Pvt. Ltd.



Product Catalogue

Company Profile

What We Do: Speedofer Components manufactures Soft Ferrite Cores in forms and shapes of Drum, EDR, EE, EER, EFD, EI, ELP, EP, EPC, ER, ET, ETD, EVD, I, Planer, Pot, PQ, Ring (Toroidal), RM, UT, UU & etc. geometries that composed of FeMnZn (Iron, Manganese & Zinc). These Ferrites are used in making Transformers, Inductors, Chokes and Ferrite Beads that apply in powering any electronics circuits.

What We Believe: Speedofer Components Believes that Research & Development is the only way forward for the products we manufacture and substantially invested in state-of-the-art Swiss made equipment lines.

Who We Are: Speedofer Components was found in 2007 by the most experienced professionals in Soft Ferrite Cores in India. Speedofer also has high skilled manpower with more than TWO DECADES of experience in the field of Ferrite Cores. Our organization work to the standards of Business Excellence and are fully committed to the principle of consistent and continuous improvement at all levels of our organization. This involves everyone, including our Suppliers and forms the basis for successful relationships.

Customized Products: Speedofer Components also sells NiZn (Nickel Zinc), Iron Powder, MPP (Molypermalloy Powder), Sendust composed and customized Ferrite Cores for special applications.

Exports: Speedofer Components generates about 15% of total revenues from exports.

Employees: 50~100

Application: Consumer Electronics, EMI, LED Lighting, Conventional Lighting, Solar Energy, Telecommunications, Power Distribution, Energy Meters Wireless Mobile Chargers & etc.

Plant Capacity: 150 Tons (60 Million Pieces) Per Month

Why Speedofer: Best Quality, Competitive Price, Product Customization & Quick Delivery

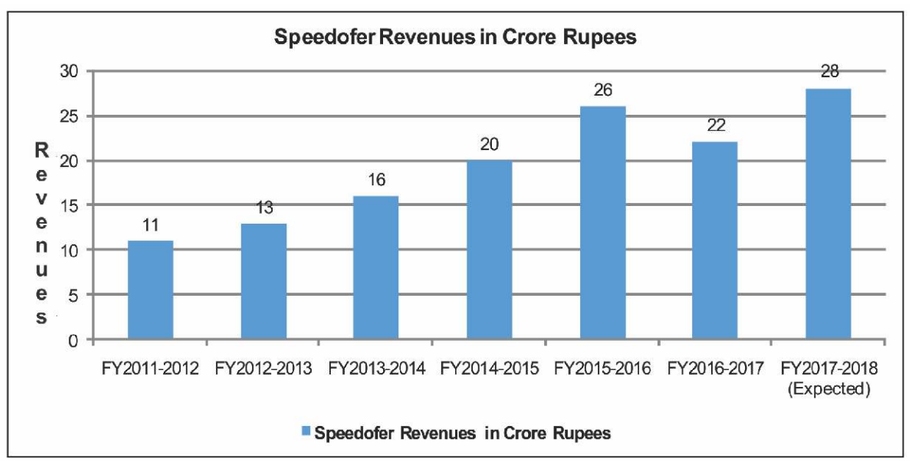
System Certifications: QMS ISO 9001:2015, EMS ISO 14001:2015, OHSAS ISO 18001:2007

System Compliance: RoHS Directive 2011/65/EU

Recognition: In-House R&D Unit Recognition Certificate by DSIR (Department of Scientific & Industrial Research), Ministry of Science & Technology, Government of India

D&B D-U-N-S Number: 67-738-4917

Speedofer Revenue Growth



Catalogue Index

Content Description	Page No
Material Characteristics Index (MnZn)	3-4
SFP300T Material Characteristics (NiZn)	5
SFA05 Material Characteristics	6
SFA07 Material Characteristics	7
SFA10 Material Characteristics	8
SFA043 Material Characteristics	9
SFA121 Material Characteristics	10
SFN4 Material Characteristics	11
SFP3 Material Characteristics	12
SFP4 Material Characteristics	13
SFP5 Material Characteristics	14
SFP40T Material Characteristics	15
SFP42 Material Characteristics	16
SFP95 Material Characteristics	17
I Cores	18
Drum Cores	19-20
EDR Cores	19-20
EE Cores	21-22
EFD Cores	23-24
EI Cores	23-24
EP Cores	25-26
EPC Cores	25-26
ER Cores	27-28
ET Cores	27-28
ETD Cores	29-30
EVD Cores	29-30
Planer Cores	31-32
Pot Cores	31-32
PQ Cores	33-34
RM Cores	35-36
Toroidal Cores	37-40
UT Cores	41-42
UU Cores	41-42
Iron Powder Cores	43-44
Sendust Cores	43-44
Definitions & Equations	45-48
Certifications & Recognitions	49
Speedofer Senior Management	50

Material Characteristics

Material Properties	Symbol	Unit	Measuring Conditions			SFA05	SFA07
			Freq.	Flux den.	Temp.		
Initial Permeability	μi		≤10kHz	0.25mT	25°C	5000±25%	7000±25%
Power Loss	Pv	kW/m^3	25kHz	200mT	25°C	-	-
					100°C	-	-
			100kHz	200mT	25°C	-	-
					100°C	-	-
			300kHz	100mT	25°C	-	-
					100°C	-	-
			500kHz	50mT	25°C	-	-
					100°C	-	-
Saturation Flux Density	Bms	mT	10kHz	H=1200A/m	25°C	440	400
					100°C	300	200
Remanence	Brms	mT	10kHz	H=1200A/m	25°C	80	150
					100°C	90	110
Coercivity	Hc	A/m	10kHz	H=1200A/m	25°C	-	-
					100°C	-	-
Relative Loss Factor	tanδ /μi	10^{-6}	10kHz	<0.25mT	25°C	<4	<8
			100kHz		25°C	<15	<30
Hysteresis Material Constant	ηB	$10^{-6/}mT$	10kHz	1.5-3.0mT	25°C	<0.8	<1.2
Disaccommodation Factor	D_F	10^{-6}	10kHz	< 0.25mT	25°C	<3	<2
Curie Temperature	Tc	°C	-	-	-	>140	>130
Resistivity	ρ	Ωm	-	-	-	0.2	0.35
Density	d	g/cm^3	-	-	-	4.85	4.9

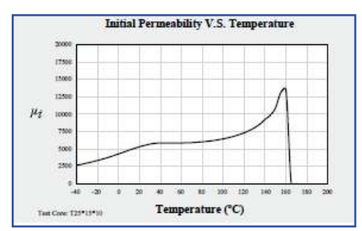
SFA10	SFA043	SFA121	SFN4	SFP3	SFP4	SFP5	SFP41	SFP42	SFP95
10000±30	4500±25%	12000±30%	2500±25%	2000±25%	2300±25%	2000±25%	2400±25%	1800±25%	3300±25%
-	-	-	-	-	-	-	125	125	-
-	-	-	-	155	-	-	50	50	-
-	-	-	-	-	650	-	650	750	380
-	-	-	-	920	410	-	350	350	300
-	-	-	-	-	-	600	820	900	-
-	-	-	-	-	-	450	500	500	-
-	-	-	-	-	-	220	400	450	-
-	-	-	-	-	-	250	300	300	-
410	460	380	450	500	510	470	495	520	520
210	300	180	320	410	390	350	395	420	410
140	65	130	90	-	100	100	170	200	120
110	60	110	100	-	55	60	70	70	90
-	-	-	-	23	14	12	11	12	12
-	-	-	-	19	-	8	6	6	9
<10	<10	<10	<17	-	-	-	-	-	
<60	<10	<60	<3	-	-	-	-	-	-
<0.5	<0.5	<0.5	<0.6	<1.5	<1.2	<1	<1.0	<1	- -
<2	<2	<2	-	-	<2	<2	<2.0	<2	-
>130	>160	>110	>170	>220	>220	>220	>230	>240	>220
0.15	0.2	0.12	7.5	3	6.5	6.4	4	8	-
4.9	4.85	4.9	4.7	4.8	4.8	4.7	4.85	4.9	4.0

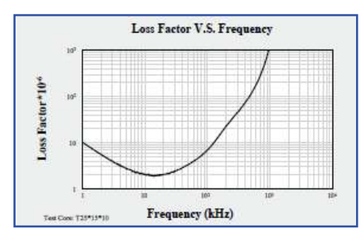
Material Characteristics - SFP300T

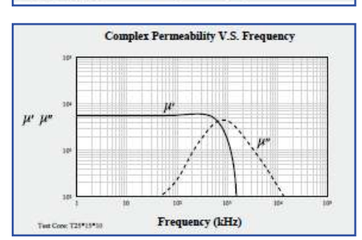
Material Properties	Symbol	Unit	Measuring Conditions			SFP300T
			Freq.	Flux den.	Temp.	
Initial Permeability	μi		≤10kHz	0.25mT	25°C	300±20%
Power Loss	Pv	kW/m^3	25kHz	200mT	25°C	-
					100°C	-
			100kHz	200mT	25°C	-
					100°C	-
			300kHz	100mT	25°C	-
					100°C	-
			500kHz	50mT	25°C	-
					100°C	-
Saturation Flux Density	Bms	mT	10kHz	H=1200A/m	25°C	4000
					100°C	
Remanence	Brms	mT	10kHz	H=1200A/m	25°C	≥2400
					100°C	
Coercivity	Hc	A/m	10kHz	H=1200A/m	25°C	0.3
					100°C	-
Relative Loss Factor	tanδ /μi	10^{-6}	10KHz	<0.25mT	25°C	-
			100kHz		25°C	-
Hysteresis Material Constant	ηB	$10^{-6/}$ mT	10kHz	1.5-3.0mT	25°C	-
Disaccommodation Factor	D_F	10^{-6}	10kHz	< 0.25mT	25°C	-
Curie Temperature	Tc	°C	-	-	-	≥180
Resistivity	ρ	Ωm	-	-	-	≥1000
Density	d	g/cm^3	-	-	-	4.9

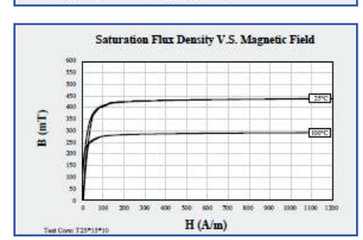
Material Characteristics - SFA05

Material Properties	Symbol	Unit	Measuring Conditions			SFA05
			Freq.	Flux den.	Temp.	
Initial Permeability	μi	⩽10kHz	-	0.25mT	25°C	5000±25%
Power Loss	Pv	kW/m^3	25kHz	200mT	25°C	-
					100°C	-
			100kHz	200mT	25°C	-
					100°C	-
			300kHz	100mT	25°C	-
					100°C	-
			500kHz	50mT	25°C	-
					100°C	-
Saturation Flux Density	Bms	mT	10KHz	H=1200A/m	25°C	440
					100°C	300
Remanence	Brms	mT	10KHz	H=1200A/m	25°C	80
					100°C	90
Coercivity	Hc	A/m	10kHz	H=1200A/m	25°C	-
					100°C	-
Relative Loss Factor	tanδ /μi	10^{-6}	10KHz	<0.25mT	25°C	<4
			100kHz		25°C	<15
Hysteresis Material Constant	ηB	$10^{-6/}$mT	10KHz	1.5-3.0mT	25°C	<0.8
Disaccommodation Factor	D_F	10^{-6}	10KHz	< 0.25mT	25°C	<3
Curie Temperature	Tc	°C	-	-	-	>140
Resistivity	ρ	Ωm	-	-	-	0.2
Density	d	g/cm^3	-	-	-	4.85



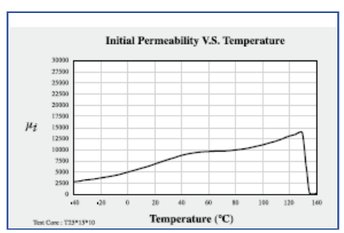


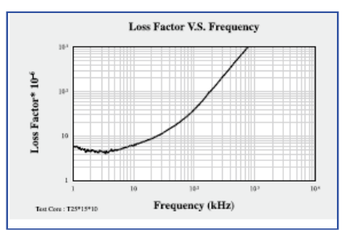


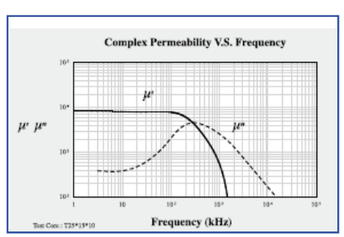


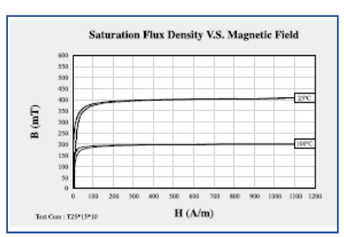
Material Characteristics - SFA07

Material Properties	Symbol	Unit	Measuring Conditions			SFA07
			Freq.	Flux den.	Temp.	
Initial Permeability	μi	-	⩽10kHz	0.25mT	25°C	7000±25%
Power Loss	Pv	kW/m^3	25kHz	200mT	25°C	-
					100°C	-
			100kHz	200mT	25°C	-
					100°C	-
			300kHz	100mT	25°C	-
					100°C	-
			500kHz	50mT	25°C	-
					100°C	-
Saturation Flux Density	Bms	mT	10kHz	H=1200A/m	25°C	400
					100°C	200
Remanence	Brms	mT	10kHz	H=1200A/m	25°C	150
					100°C	110
Coercivity	Hc	A/m	10kHz	H=1200A/m	25°C	-
					100°C	-
Relative Loss Factor	tanδ /μi	10^{-6}	10kHz	<0.25mT	25°C	<8
			100kHz		25°C	<30
Hysteresis Material Constant	ηB	$10^{6}/mT$	10kHz	1.5-3.0mT	25°C	<1.2
Disaccommodation Factor	D_F	10^{-6}	10kHz	< 0.25mT	25°C	<2
Curie Temperature	Tc	°C	-	-	-	>130
Resistivity	ρ	Ωm	-	-	-	0.35
Density	d	g/cm^3	-	-	-	4.9



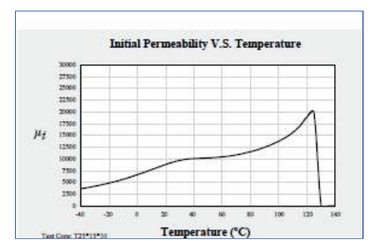


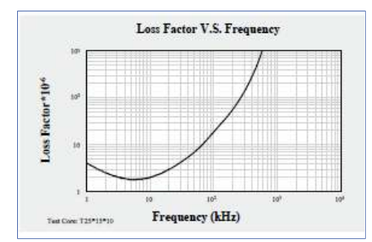


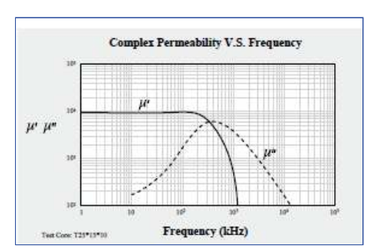


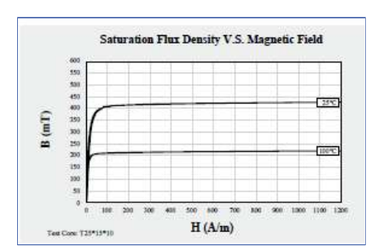
Material Characteristics - SFA10

Material Properties	Symbol	Unit	Measuring Conditions			SFA10
			Freq.	Flux den.	Temp.	
Initial Permeability	μi	-	⩽10kHz	0.25mT	25°C	10000±30%
Power Loss	Pv	kW/m^3	25kHz	200mT	25°C	-
					100°C	-
			100kHz	200mT	25°C	-
					100°C	-
			300kHz	100mT	25°C	-
					100°C	-
			500kHz	50mT	25°C	-
					100°C	-
Saturation Flux Density	Bms	mT	10kHz	H=1200A/m	25°C	400
					100°C	210
Remanence	Brms	mT	10kHz	H=1200A/m	25°C	140
					100°C	110
Coercivity	Hc	A/m	10kHz	H=1200A/m	25°C	-
					100°C	-
Relative Loss Factor	tanδ /μi	10^{-6}	10kHz	<0.25mT	25°C	<10
			100kHz		25°C	<60
Hysteresis Material Constant	ηB	$10^{6}/mT$	10kHz	1.5-3.0mT	25°C	<0.5
Disaccommodation Factor	D_F	10^{-6}	10kHz	< 0.25mT	25°C	<2
Curie Temperature	Tc	°C	-	-	-	>130
Resistivity	ρ	Ωm	-	-	-	0.35
Density	d	g/cm^3	-	-	-	4.9



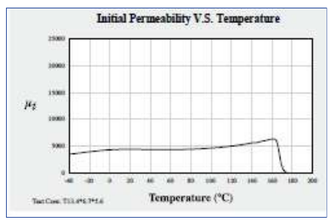


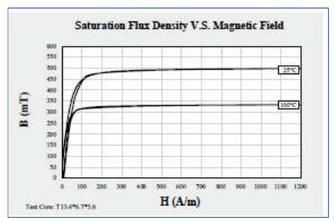


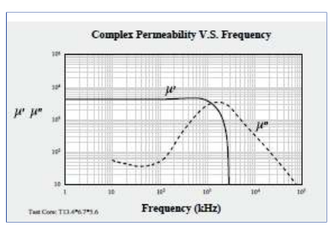


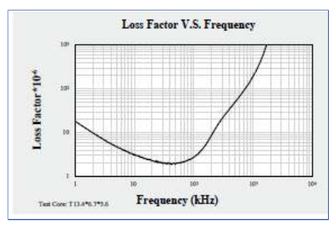
Material Characteristics - SFA043

Material Properties	Symbol	Unit	Measuring Conditions			SFA043
			Freq.	Flux den.	Temp.	
Initial Permeability	μi	-	⩽10kHz	0.25mT	25°C	4500±25%
Power Loss	Pv	kW/m^3	25kHz	200mT	25°C	-
					100°C	-
			100kHz	200mT	25°C	-
					100°C	-
			300kHz	100mT	25°C	-
					100°C	-
			500kHz	50mT	25°C	-
					100°C	-
Saturation Flux Density	Bms	mT	10kHz	H=1200A/m	25°C	460
					100°C	300
Remanence	Brms	mT	10kHz	H=1200A/m	25°C	65
					100°C	60
Coercivity	Hc	A/m	10kHz	H=1200A/m	25°C	-
					100°C	-
Relative Loss Factor	tanδ /μi	10^{-6}	10kHz	<0.25mT	25°C	<10
			100kHz		25°C	<60
Hysteresis Material Constant	ηB	$10^{6}/mT$	10kHz	1.5-3.0mT	25°C	<0.5
Disaccommodation Factor	D_F	10^{-6}	10kHz	< 0.25mT	25°C	<2
Curie Temperature	Tc	°C	-	-	-	>160
Resistivity	ρ	Ωm	-	-	-	0.2
Density	d	g/cm^3	-	-	-	4.85



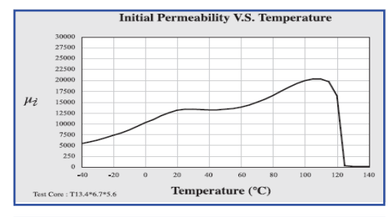


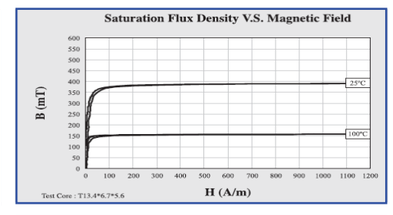


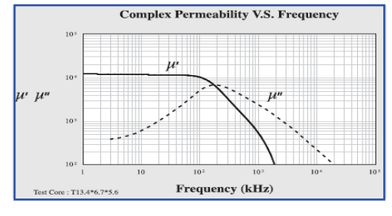


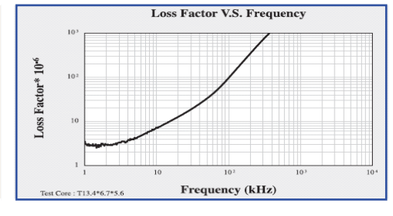
Material Characteristics - SFA121

Material Properties	Symbol	Unit	Measuring Conditions			SFA121
			Freq.	Flux den.	Temp.	
Initial Permeability	μi	-	⩽10kHz	0.25mT	25°C	12000±30%
Power Loss	Pv	kW/m^3	25kHz	200mT	25°C	-
					100°C	-
			100kHz	200mT	25°C	-
					100°C	-
			300kHz	100mT	25°C	-
					100°C	-
			500kHz	50mT	25°C	-
					100°C	-
Saturation Flux Density	Bms	mT	10kHz	H=1200A/m	25°C	380
					100°C	180
Remanence	Brms	mT	10kHz	H=1200A/m	25°C	130
					100°C	110
Coercivity	Hc	A/m	10kHz	H=1200A/m	25°C	-
					100°C	-
Relative Loss Factor	tanδ /μi	10^{-6}	10kHz	<0.25mT	25°C	<10
			100kHz		25°C	<60
Hysteresis Material Constant	ηB	$10^{6}/mT$	10kHz	1.5-3.0mT	25°C	<0.5
Disaccommodation Factor	D_F	10^{-6}	10kHz	< 0.25mT	25°C	<2
Curie Temperature	Tc	°C	-	-	-	>110
Resistivity	ρ	Ωm	-	-	-	0.2
Density	d	g/cm^3	-	-	-	4.9



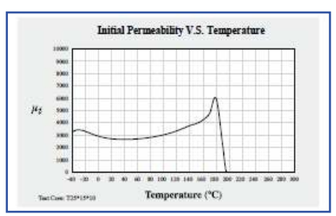


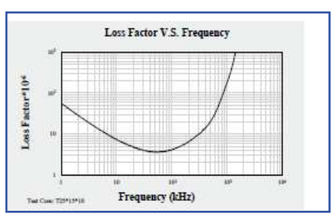


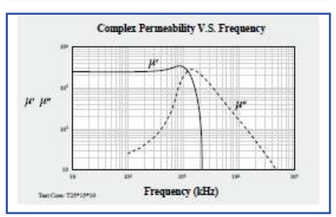


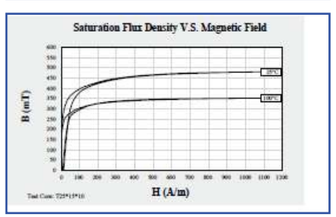
Material Characteristics - SFN4

Material Properties	Symbol	Unit	Measuring Conditions			SFN4
			Freq.	Flux den.	Temp.	
Initial Permeability	μi	-	⩽10kHz	0.25mT	25°C	2500±25%
Power Loss	Pv	kW/m³	25kHz	200mT	25°C	-
					100°C	-
			100kHz	200mT	25°C	-
					100°C	-
			300kHz	100mT	25°C	-
					100°C	-
			500kHz	50mT	25°C	-
					100°C	-
Saturation Flux Density	Bms	mT	10kHz	H=1200A/m	25°C	450
					100°C	320
Remanence	Brms	mT	10kHz	H=1200A/m	25°C	90
					100°C	100
Coercivity	Hc	A/m	10kHz	H=1200A/m	25°C	-
					100°C	-
Relative Loss Factor	tanδ /μi	10^{-6}	10kHz	<0.25mT	25°C	<17
			100kHz		25°C	<3
Hysteresis Material Constant	ηB	10^{6}/mT	10kHz	1.5-3.0mT	25°C	<0.6
Disaccommodation Factor	D_F	10^{-6}	10kHz	< 0.25mT	25°C	-
Curie Temperature	Tc	°C	-	-	-	>170
Resistivity	ρ	Ωm	-	-	-	7.5
Density	d	g/cm³	-	-	-	4.7



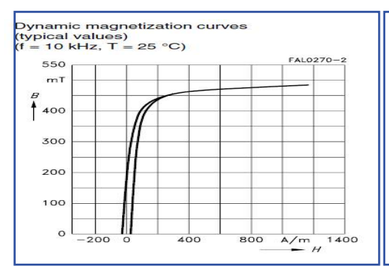


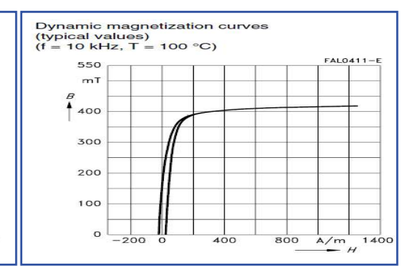


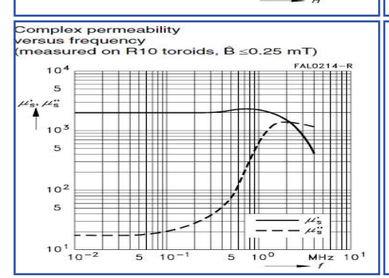


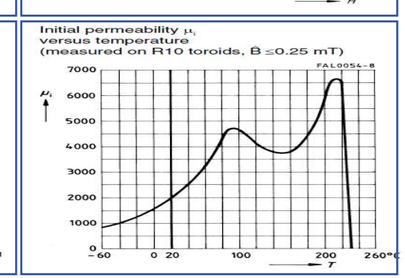
Material Characteristics - SFP3

Material Properties	Symbol	Unit	Measuring Conditions			SFP3
			Freq.	Flux den.	Temp.	
Initial Permeability	μi	-	≤10kHz	0.25mT	25°C	2000±25%
Power Loss	Pv	kW/m³	25kHz	200mT	100°C	155
			100kHz	200mT	100°C	920
			300kHz	100mT	100°C	-
			500kHz	50mT	100°C	-
Saturation Flux Density	Bms	mT	10kHz	H=1200A/m	25°C	500
					100°C	410
Remanence	Brms	mT	10kHz	H=1200A/m	25°C	-
					100°C	-
Coercivity	Hc	A/m	10kHz	H=1200A/m	25°C	23
					100°C	19
Relative Loss Factor	tanδ /μi	10^{-6}	10kHz	<0.25mT	25°C	-
			100kHz		25°C	-
Hysteresis Material Constant	ηB	10^{-6}/mT	10kHz	1.5-3.0mT	25°C	<1.5
Disaccommodation Factor	D_F	10^{-6}	10kHz	< 0.25mT	25°C	-
Curie Temperature	Tc	°C	-	-	-	>220
Resistivity	ρ	Ωm	-	-	-	3
Density	d	g/cm³	-	-	-	4.8



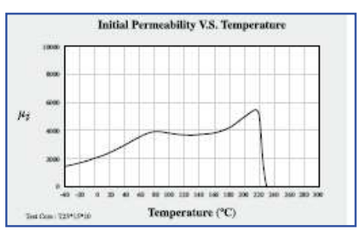


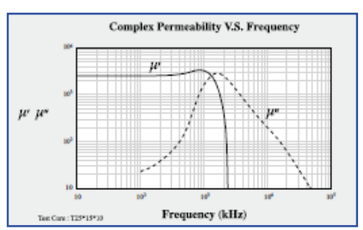


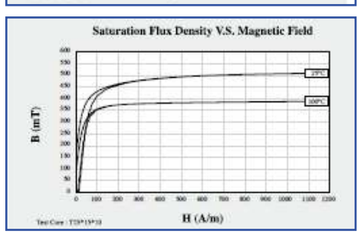


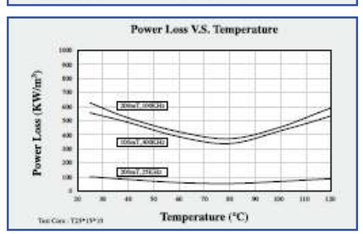
Material Characteristics - SFP4

Material Properties	Symbol	Unit	Measuring Conditions			SFP4
			Freq.	Flux den.	Temp.	
Initial Permeability	μi	-	≤10kHz	0.25mT	25°C	2300±25%
Power Loss	Pv	kW/m^3	25kHz	200mT	25°C	105
					100°C	55
			100kHz	200mT	25°C	650
					100°C	410
			300kHz	100mT	25°C	660
					100°C	430
			500kHz	50mT	25°C	380
					100°C	330
Saturation Flux Density	Bms	mT	10kHz	H=1200A/m	25°C	510
					100°C	390
Remanence	Brms	mT	10kHz	H=1200A/m	25°C	100
					100°C	55
Coercivity	Hc	A/m	10kHz	H=1200A/m	25°C	14
					100°C	6
Relative Loss Factor	tanδ /μi	10^{-6}	10kHz	<0.25mT	25°C	-
			100kHz		25°C	-
Hysteresis Material Constant	ηB	10^{-6}/ mT	10kHz	1.5-3.0mT	25°C	<1.2
Disaccommodation Factor	D_F	10^{-6}	10kHz	< 0.25mT	25°C	<2
Curie Temperature	Tc	°C	-	-	-	>220
Resistivity	ρ	Ωm	-	-	-	6.5
Density	d	g/cm^3	-	-	-	4.8



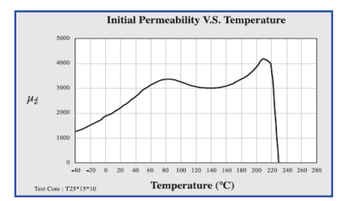


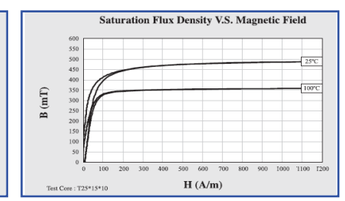


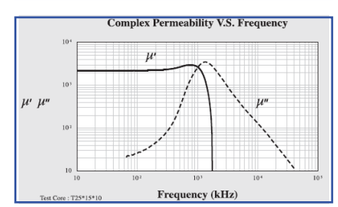


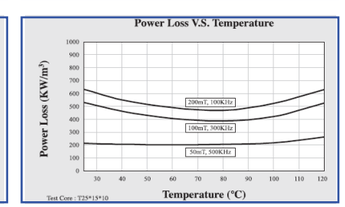
Material Characteristics - SFP5

Material Properties	Symbol	Unit	Measuring Conditions			SFP5
			Freq.	Flux den.	Temp.	
Initial Permeability	μi	-	≤10kHz	0.25mT	25°C	2000±25%
Power Loss	Pv	kW/m^3	25kHz	200mT	25°C	-
					100°C	-
			100kHz	200mT	25°C	-
					100°C	-
			300kHz	100mT	25°C	600
					100°C	450
			500kHz	50mT	25°C	220
					100°C	250
Saturation Flux Density	Bms	mT	10kHz	H=1200A/m	25°C	470
					100°C	350
Remanence	Brms	mT	10kHz	H=1200A/m	100°C	100
					100°C	60
Coercivity	Hc	A/m	10kHz	H=1200A/m	25°C	12
					100°C	8
Relative Loss Factor	tanδ /μi	10^{-6}	10kHz	<0.25mT	25°C	-
			100kHz		25°C	-
Hysteresis Material Constant	ηB	10^{-6}/mT	10kHz	1.5-3.0mT	25°C	<1
Disaccommodation Factor	D_F	10^{-6}	10kHz	< 0.25mT	25°C	<2
Curie Temperature	Tc	°C	-	-	-	>220
Resistivity	ρ	Ωm	-	-	-	6.4
Density	d	g/cm^3	-	-	-	4.7







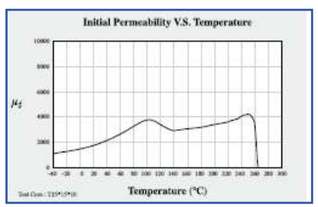


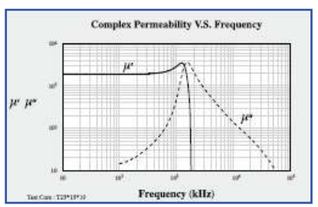
Material Characteristics - SFP40T

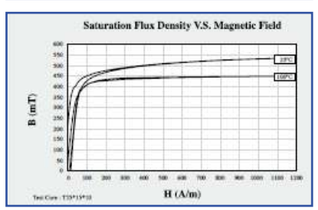
Material Properties	Symbol	Unit	Measuring Conditions			SFP40T
			Freq.	Flux den.	Temp.	
Initial Permeability	μi	-	⩽10kHz	0.25mT	25°C	800±25%
Power Loss	Pv	kW/m^3	25kHz	200mT	25 °C	-
					100°C	-
			100kHz	200mT	25 °C	-
					100°C	-
			300kHz	100mT	25 °C	-
					100°C	-
			500kHz	50mT	25 °C	-
					100°C	-
Saturation Flux Density	Bms	mT	10kHz	H=1200A/m	25°C	-
					100°C	<1.5
Remanence	Brms	mT	10kHz	H=1200A/m	100°C	-
					100°C	-
Coercivity	Hc	A/m	10kHz	H=1200A/m	25°C	<1.5
					100°C	-
Relative Loss Factor	tanδ /μi	10^{-6}	10kHz	<0.25mT	25°C	$<100*10^{-6}$
			100kHz		25°C	-
Hysteresis Material Constant	ηB	$10^{-6}/mT$	10kHz	1.5-3.0mT	25°C	-
Disaccommodation Factor	D_F	10^{-6}	10kHz	< 0.25mT	25°C	-
Curie Temperature	Tc	°C	-	-	-	>170
Resistivity	ρ	Ωm	-	-	-	>1000
Density	d	g/cm^3	-	-	-	4.74

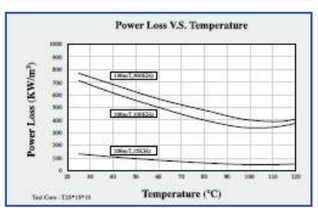
Material Characteristics - SFP42

Material Properties	Symbol	Unit	Measuring Conditions			SFP42
			Freq.	Flux den.	Temp.	
Initial Permeability	μi	-	⩽10kHz	0.25mT	25°C	1800±25%
			25kHz	200mT	25°C	125
					100°C	50
			100kHz	200mT	25°C	750
					100°C	350
Power Loss	Pv	kW/m^3	300kHz	100mT	25°C	900
					100°C	500
			500kHz	50mT	25°C	450
					100°C	300
Saturation Flux Density	Bms	mT	10kHz	H=1200A/m	25°C	520
					100°C	420
Remanence	Brms	mT	10kHz	H=1200A/m	25°C	200
					100°C	70
Coercivity	Hc	A/m	10kHz	H=1200A/m	25°C	12
					100°C	6
Relative Loss Factor	tanδ /μi	10^{-6}	10kHz	<0.25mT	25°C	-
			100kHz		25°C	-
Hysteresis Material Constant	ηB	$10^{6}/mT$	10kHz	1.5 3.0mT	25°C	<1
Disaccommodation Factor	D_F	10^{-6}	10kHz	< 0.25mT	25°C	<2
Curie Temperature	Tc	°C	-	-	-	>240
Resistivity	ρ	Ωm	-	-	-	8
Density	d	g/cm^3	-	-	-	4.9

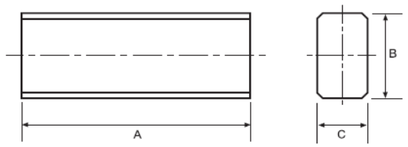








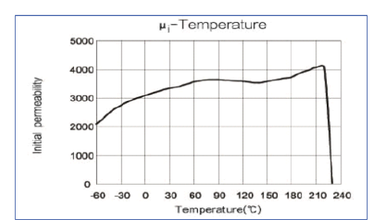
I Cores

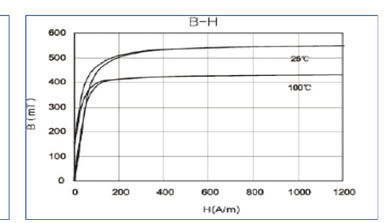


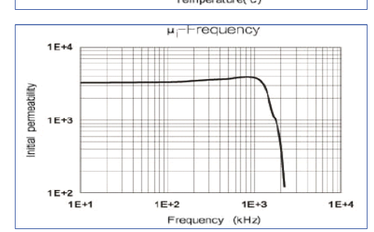
Geometry	Dimensions		
Type	A (mm)	B (mm)	C (mm)
I 30/4/2	30.0±0.50	4.0±0.15	2.00±0.15
I 80/14.7/4	80.0±1.20	14.30±0.2	4.0±0.10
I 93/16	93.00±1.8	28.0±0.5	16.0±0.5
I 93/30	93.00±1.8	28.0±0.5	30.0±0.6

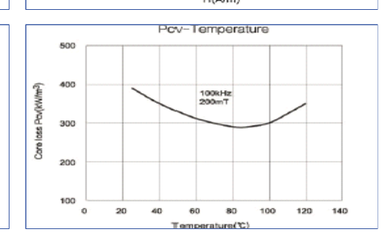
Material Characteristics - SFP95

Material Properties	Symbol	Unit	Measuring Conditions			SFP95
			Freq.	Flux den.	Temp.	
Initial Permeability	μi	-	⩽10kHz	0.25mT	25°C	3300±25%
			25kHz	200mT	25 °C	-
					100°C	-
			100kHz	200mT	25°C	380
					100°C	300
Power Loss	Pv	kW/m^3	300kHz	100mT	25°C	-
					100°C	-
			500kHz	50mT	25°C	-
					100°C	-
Saturation Flux Density	Bms	mT	10kHz	H=1200A/m	25°C	520
					100°C	410
Remanence	Brms	mT	10kHz	H=1200A/m	25°C	120
					100°C	90
Coercivity	Hc	A/m	10kHz	H=1200A/m	25°C	12
					100°C	9
Relative Loss Factor	tanδ /μi	10^{-6}	10KHz	<0.25mT	25°C	-
			100kHz		25°C	-
Hysteresis Material Constant	ηB	$10^{6/}mT$	10kHz	1.5 3.0mT	25°C	-
Disaccommodation Factor	D_F	10^{-6}	10kHz	< 0.25mT	25°C	-
Curie Temperature	Tc	°C	-	-	-	>220
Resistivity	ρ	Ωm	-	-	-	
Density	d	g/cm^3	-	-	-	4.0

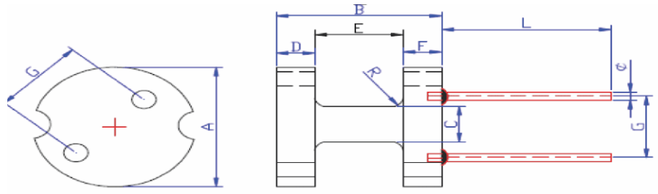






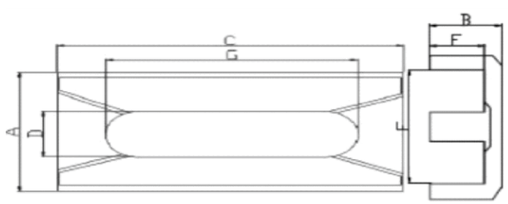


Drum Cores



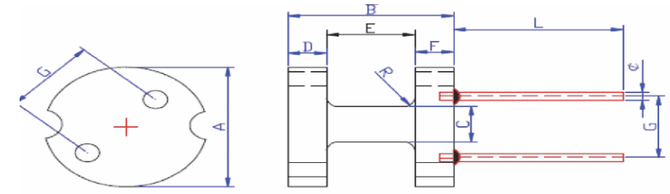
Geometry	Dimensions			
Type	A (mm)	B (mm)	C (mm)	D (mm)
DR6*8 with pin with cut	6.0±0.25	8.3±0.3	2.5.±0.20	2.0±0.15
DR8*10 with pin with cut	8.0±0.20	10±0.3	3.5.±0.15	2.0±0.15
DR8*12 with pin with cut	8.0±0.25	12.0±0.3	3.5.±0.2	2.0±0.20
DR10*12 with pin with cut	10.0±0.25	12±0.3	5.0±0.25	2.5±0.15
DR12*15 with pin with cut	12.0±0.30	15.0±0.3	5.0±0.25	2.5±0.15

EDR Cores



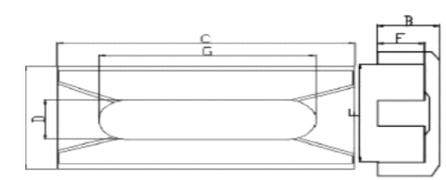
Geometry	Dimensions			
Type	A (mm)	B (mm)	C (mm)	D (mm)
EDR2009	13.5±0.5	4.6±0.2	20.2±0.5	2.70±0.2
EDR2609	13.5±0.5	4.6±0.2	26.0±0.5	2.70±0.2
EDR2809	13.5±0.5	5.0±0.2	28.0±0.5	3.2±0.2
EDR3909	13.5±0.5	4.5±0.2	39.4±0.2	2.70±0.2

Drum Cores



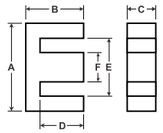
Dimensions				Material Grade
E (mm)	F (mm)	G (mm)	L (mm)	AL Value (±15%) in nH SFP40T
4.3±0.2	2.0±0.15	3.0±0.5	10.5±0.5	26.3
5.8±0.2	2.0±0.15	5.0±0.5	10.5±0.5	26.3
7.0±0.25	2.5±0.20	5.0±0.3	10.5±0.5	38.8
4.0±0.4	2.5±0.15	5.0±0.3	10.5±0.5	38.8
10.0±0.25	2.5±0.15	7.0±0.3	10.5±0.5	47.6

EDR Cores

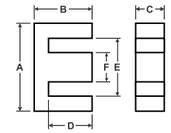


Dimensions			Electrical Characteristics			Material Grades
E (mm)	F (mm)	G (mm)	Le mm	Ae mm^2	Ve mm^3	AL Values (±25%) in nH SFP95
10.4 min	2.90±0.20	15.75±0.30	20.6	56.3	1159.0	4000
10.4 min	2.70±0.20	21.75±0.30	23.6	71.0	1677.8	6500
10.0 min	3.40±0.20	25.3±0.30	26.7	77.1	2060.0	6500
10.4 min	2.80±0.20	35.0±0.20	24.8	102.3	2537.5	7500

EE Cores

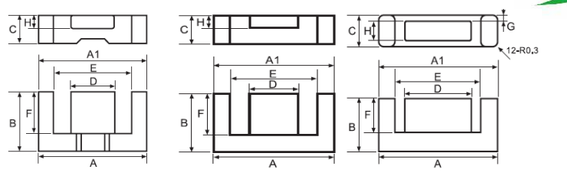


Geometry	Dimensions				
Type	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)
EE10/5.5/5	10.4±0.4	5.7±0.1	4.50±0.30	4.40±0.15	7.7min
EE12.6/6.5/6.3	12.6+0.5/-0.4	6.50+0.0/-0.2	6.30+0.0/-0.3	4.90±0.20	8.9min
EE12.95/6.5/9.8	12.95±0.30	6.50±0.20	9.80±0.20	4.90±0.20	8.9min
EE13/07/04	12.6+0.5/-0.4	6.50+0.0/-0.2	3.70+0.0/-0.3	4.50+0.3/-0.0	8.9min
EE13/06/06	13.0±0.5	6.25±0.25	6.10±0.2	4.90±0.20	9.7min
EE14.2/4.9/7.3	14.20±0.25	4.90±0.15	7.30±0.20	3.00±0.15	10.5min
EE14.5/6.5/5.5	14.5±0.5	6.50±0.20	5.70±0.2	4.50±0.2	10.5min
EE16/06/05	16.0+0.7/-0.5	6.0±0.2	4.7±0.5	4.0±0.2	11.30min
EE16/06/07	16.0+0.7/-0.5	6.10±0.20	7.1±0.3	4.10±0.20	11.30min
EE16/07/05	16.20±0.40	7.45±0.25	4.80±0.20	5.45±0.25	11.70min
EE16/08/05	16.0+0.7/-0.5	8.15±0.15	4.7+0.0/-0.4	6.0±0.2	11.30min
EE16/08/07	16.0±0.4	8.20±0.20	7.0±0.3	6.20±0.20	11.20min
EE16/09/07	16.0+0.7-0.5	9.5±0.2	7.0±0.3	7.4±0.20	11.30min
EE19/08/05	19.0±0.5	8.20±0.20	4.8±0.2	6.00±0.20	14.00min
EE19/08/5.5	19.0±0.5	8.15±0.15	5.3±0.2	5.8±0.2	14.00min
EE19/08/07	19.0±0.5	8.20±0.20	6.7±0.3	6.0±0.2	14.40min
EE19/08/09	19.0±0.5	8.20±0.20	9.0±0.3	6.0±0.2	14.00min
EE20/10/05	20.20±0.5	10.20±0.30	5.10±0.20	7.25±0.25	12.40min
EE20/10/06	20.1±0.5	10.20±0.30	5.65±0.25	7.25±0.25	14.10min
EE20/10/09	20.2±0.4	10.20±0.30	8.80±0.20	7.25±0.25	14.10min
EE20/10/09A	20.0±0.60	9.90±0.20	8.80±0.25	7.20±0.20	14.10min
EE20/10/11	20.0+0.8/-0.6	10.00±0.20	10.60±0.20	7.20±0.20	14.10min
EE22/09/06	22.0±6.0	9.2±0.3	5.7±0.3	5.5±0.25	15.6min
EE25/09/06	25.4±0.5	9.75±0.25	6.4±0.3	6.95±0.25	18.6min
EE25/13/07	25.0+0.8/-0.7	12.55±0.25	7.2±0.3	9.05±0.25	17.5min
EE25/13/11	25.0+0.8/-0.7	12.55±0.25	11.0±0.3	9.05±0.25	17.5min
EE28/10/11	28.2±0.7	10.6±0.4	10.7±0.3	6.70±0.30	19.8min
EE30/15/07	30.1±0.7	15.0±0.2	7.05±0.25	10.0±0.3	19.9±0.4
EE32/16/09	32.1±0.8	16.1±0.3	9.15±0.35	11.6±0.3	22.7min
EE32/16/11	32.1+0.8/-0.5	15.8±0.3	11.0+0/-0.7	11.6±0.4	22.7+1.0/-0
EE36/18/11	36.0+1.0/-0.7	17.8±0.2	11.25±0.25	12.3±0.3	24.5min
EE40/16/12	40.6±0.6	16.50±0.2	12.50±0.25	10.50±0.30	28.6min
EE42/21/15	42.0+1.0/-0.7	21.0±0.2	14.95±0.25	15.15±0.35	29.5+1.2/-0.0
EE42/21/20	42.0+1.0/-0.7	21.0±0.2	20.0-0.8	15.15±0.35	29.5+1.2/-0.0
EE55/28/21	55.0+1.2/-0.9	27.5±0.3	20.7±0.3	18.9±0.4	37.5+1.2/-0
EE65/32/27	65.0+1.5/-1.2	32.5±0.3	27.4+0.0/-1.0	22.6±0.4	42.2+1.8/-0.0
EE70/33/32	70.0±1.0	33.2+0/-0.50	31.6±0.40	21.9±0.70	48.0min.
EE80/38/20	80.0±1.8	38.5+0/-0.8	20.2+0.0/-0.8	27.9+0.8/-0.0	58.9+2.6/-0.0
EE100/60/28	100.3±2.0	59.4±0.5	27.5±0.5	46.85±0.5	73.15±1.15



Dimensions	Electrical Characteristics			Material Grades		
F (mm)	Le mm	Ae mm^2	Ve mm^3	AL Values in nH SFP4	SFA05	SFA07
2.40±0.20	26.3	12.0	323.0	800±25%	1500	1750
3.7+0.0/-0.3	29.6	22.4	663.0	1380+30%-20%	-	-
3.55±0.15	29.4	34.6	1018.0	2240±25%	-	-
3.7+0.0/-0.3	29.6	12.4	367.0	850+30%-20%	-	-
2.75±0.20	30.2	17.2	520.0	1100±25%	1660±25%	1950±25%
3.45±0.20	25.0	26.0	647.9	2000±25%	-	-
4.0±0.20	33.3	23.3	775.9	1500±25%	-	-
4.55±0.2	28.6	19.2	549.0	1200±25%	-	-
4.55±0.2	28.9	32.7	945.2	1800+30%-20%	-	-
4.0±0.3	35.1	19.2	675.0	1000+30%-20%	-	-
4.7+0.0/-0.3	37.6	20.1	756.0	1100±25%	1400+30%-20%	
4.6±0.2	40.5	31.9	1292.8	1900+30%-20%	-	-
4.0±0.2	44.0	28.3	1247.6	1000+30%-20%	-	-
4.8±0.2	39.6	22.5	891.0	1150+30%-20%	1700 +30%-20%	
4.8±0.2	39.6	22.5	891.0	1150+30%-20%	-	-
4.7±0.2	40.6	31.0	1254.3	1600±25%	-	-
4.8±0.2	39.6	42.3	1676.0	1900+30%-20%	-	-
5.00±0.20	43.0	31.0	1333.0	1400+/-25%	-	-
5.65±0.25	46.3	32.1	1490.0	1570+30%-20%	2150+30%-20%	3250+30%-20%
5.65±0.25	49.7	41.1	2042.0	1730+30%-20%	-	-
5.70±0.20	46.2	48.1	2226.0	2170±25%	-	-
5.70±0.20	46.0	60.0	2787.0	2730±25%	-	-
5.75±0.25	35.6	42.4	1506.0	1600±25%	-	-
6.4±0.3	49.2	38.8	1910.0	1670+30%-20%	2700+30%-20%	
7.2±0.3	57.5	52.5	3020.0	1850+30%-20%	2900+30%-20%	
7.2±0.3	57.5	84.7	4870.3	2700+30%-20%	-	-
7.2±0.3	51.6	81.7	4215.0	3500±25%	-	-
6.95±0.25	67.0	60.0	4000.0	1900+30%-20%	-	-
9.20±0.3	74.0	83.0	6140.0	2300+30%-20%	-	-
9.5+0/-0.6	74.0	97.0	7187.0	2900+30%-20%	3800+30%-20%	
9.95±0.25	81.0	120.0	9670.0	3100+30%-20%	-	-
12.50±0.25	77.0	149.0	11500.0	4150+30%-20%	-	-
12.2+0/-0.5	97.0	178.0	17300.0	3950+30%-20%	7500+30%-20%	
12.2+0/-0.5	97.0	234.0	22700.0	5200+30%-20%	-	-
16.95±0.25	124.0	354.0	43900.0	6400+30%-20%	-	-
20.0+0.0/-0.7	147.0	535.0	78600.0	7900+30%-20%	-	-
22.0±0.70	149.0	683.0	102000.0	10000±25%	-	-
20.2+0/-0.8	184.0	390.0	71800.0	4500+30%-20%	-	-
27.5±0.5	274.0	735.0	201400.0	6500+30%-20%	-	-

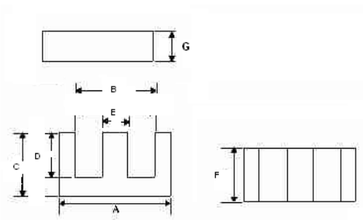
EFD Cores



Type - 1 Type - 2 Type - 3

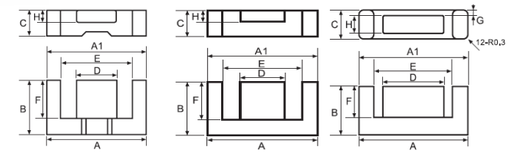
Geometry	Dimensions						
Type	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	H (mm)
EFD6.2/3.15/2.5	6.25±0.15	3.15±0.10	2.50±0.10	2.50±0.10	4.85±0.15	2.30±0.10	1.25±0.10
EFD8/4/2	8.00±0.15	3.70±0.10	1.90±0.10	3.40±0.10	5.90min	2.30±0.10	0.90±0.10
EFD9.5/4.5/2	9.60±0.15	4.60±0.10	2.20±0.10	4.00±0.10	7.35±0.15	3.00±0.10	1.15±0.10
EFD10/5/3	10.00±0.3	5.20±0.10	2.70±0.10	4.55±0.15	7.65±0.25	3.75±0.15	1.45±0.10
EFD13/7/3	13.20±0.35	6.85±0.15	2.85±0.15	5.25±0.15	9.60 ±0.20	4.80±0.15	1.40±0.10
EFD15/8/5	15.70±0.40	7.50±0.15	4.60±0.20	5.25±0.30	11.50±0.35	5.50±0.25	2.30±0.15
EFD20/10/7	20.40±0.55	10.20±0.20	6.75±0.15	8.85 ±0.20	15.30min	8.00±0.20	3.60±0.15
EFD25/13/9	25.30±0.50	12.60±0.30	9.10±0.30	11.20±0.30	18.70±0.60	9.50±0.30	5.20±0.20
EFD30/15/09	31.6±0.50	15.00±0.15	9.25±0.25	14.50±0.25	23.60min	11.20±0.30	4.75±0.20

EI Cores



Geometry	Dimensions					
Type	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)
EI28/11	6.00±0.15	18.6+0.8	17.3±0.3	12.8±0.2	7.5-0.8	11.0-0.6
EI30/11	28.00±0.4	20.7+0.7	21.0+0.6	16.0+0.6	11.0-0.7	11.0-0.7
EI33/13	30.0+0.7/-0.20	23.2+0.8	23.30±0.3	19.05±0.35	9.7±0.3	12.70±0.3
EI35/12	33.0±0.50	25.0+0.8	23.80±0.7	18.0+0.6	10.3-0.6	11.70±0.6
EI40/12	35.0+0.8/-0.5	27.2+1.0	27.20±0.5	20.0±0.5	12.0-0.7	12.0-0.7

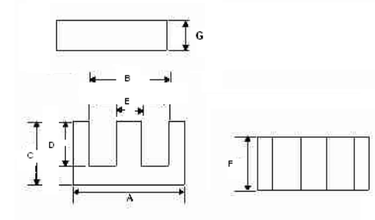
EFD Cores

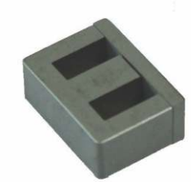


Type - 1 Type - 2 Type - 3

Electrical Characteristics				Material Grades			Reference
				AL Values (+30/-25%) in nH			
A-A1 (mm)	Le mm	Ae mm²	Ve mm³	SFP4	SFP5	SFA05	Type
0.15max	14.26	3.29	45.49	390	-	-	2
0.15max	15.95	3.19	52.48	-	-	-	2
⩽0.13	20.1	4.8	97.5	460	-	-	1
NA	23.1	7.2	166	450	-	-	1
⩽0.30	29.28	8.18	239.5	600	500	-	1
⩽0.15	36.1	14.86	536.5	780+30%-20%	630+30%-20%	1400	1
⩽0.25	47	31	1460	1200+30/-20%	1000	-	3
⩽0.30	57	58	3310	2000+30%-20%	1600	4400±25%	3
⩽0.30	68	69	4690	2050+30%-20%	1600	4400±25%	1

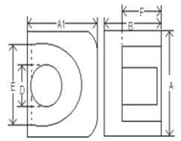
EI Cores





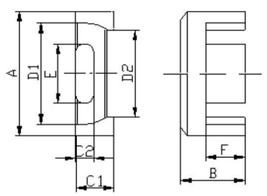
Dimensions	Electrical Characteristics				Material Grades	
					AL Values (+30-20%) in nH	
G (mm)	Le mm	Ve mm³	Ae mm²	Ve mm³	SFP4	SFA05
3.5±0.2	3.5±0.2	49.5	84.4	4177.8	3600	6600
5.5±0.2	5.5±0.2	58.5	110.4	6458.4	3700	-
5.0±0.2	5.0±0.2	66.9	118.8	7948	3600	-
5.5±0.2	5.5±0.2	67.3	120	8076	3600	-
7.5±0.3	7.5±0.3	76.8	148	11366.4	3950	-

EP Cores



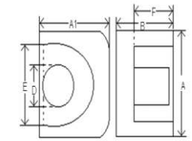
Geometry	Dimensions					
Type	A (mm)	A1 (mm)	B (mm)	D (mm)	E (mm)	F (mm)
EP5/3/4	6.00±0.15	3.80±0.10	2.80±0.05	1.70±0.10	4.40±0.15	2.00±0.10
EP7/3.5/6	9.20±0.20	6.35±0.15	3.75±0.10	3.30±0.10	7.40±0.20	2.60±0.10
EP7/3.5/6 Laker	9.20±0.35	6.35±0.20	3.75±0.20	3.30±0.20	7.40±0.30	2.60±0.20
EP10/5/7	11.50±0.30	7.65±0.20	5.20±0.10	3.30±0.15	9.40±0.20	3.70±0.10
EP13/6.5/9	12.50±0.30	8.80±0.20	6.50±0.10	4.35±0.15	10.10±0.20	4.60±0.10
EP13/6.5/9 Laker	12.60±0.30	8.80±0.20	6.62±0.15	4.35±0.15	10.10±0.30	4.80±0.15
EP17/8.5/11	18.00±0.40	11.00±0.20	8.40±0.20	5.70±0.20	12.00±0.40	5.65±0.15

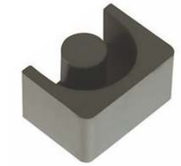
EPC Cores



Geometry	Dimensions					
Type	A (mm)	B (mm)	C1 (mm)	C2 (mm)	D1 (mm)	D2 (mm)
EPC10/4/3	10.20±0.20	4.05±0.10	3.4±0.16	1.90±0.10	7.6min.	5.3min.
EPC13/6/4	13.50±0.30	5.90±0.10	3.6+0/-0.25	2.20±0.20	10.3min.	8.1min.
EPC13/6.5/4.65	13.50±0.30	6.70±0.30	4.65±0.25	2.20±0.20	10.3min.	8.1min.
EPC14/6.5/4.65	14.30±0.30	6.70±0.30	4.70±0.20	2.00±0.15	11.40min.	9.40min.
EPC14/7/7	13.75±0.25	6.85±0.15	6.86±0.15	5.15±0.10	10.0min.	7.7min.
EPC17/7.6/6	17.60±0.40	7.60±0.20	6.0±0.15	2.80±0.10	14.3min.	11.5min.
EPC17/8.50/6	17.60±0.40	8.55±0.20	6.0±0.15	2.80±0.10	14.3min.	11.5min.
EPC19/9.75/6	19.60±0.50	9.75±0.20	6.0±0.15	2.50±0.10	15.8min.	13.1min.
EPC19/10/6	19.60±0.50	10.0±0.20	6.0±0.15	2.50±0.10	15.8min.	13.1min.
EPC20/10/06	19.60±0.50	9.85±0.20	6.0±0.20	2.40±0.15	16.0min.	13.1min.
EPC25/12.5/8	25.10±0.50	12.5±0.20	8.0±0.20	4.0±0.10	20.65min.	17.1min.
EPC30/18/8	30.10±0.50	17.5±0.20	8.0±0.20	4.0±0.10	23.6min.	20.0min.

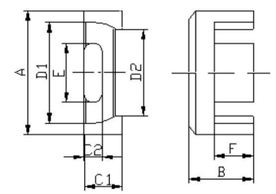
EP Cores





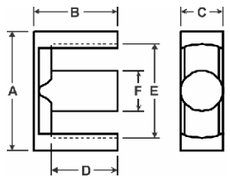
Electrical Characteristics			Material Grades				
Le mm	Ae mm^2	Ve mm^3	SFP4	SFP41	AL Values (+30-20%) in nH SFP5	SFA05	SFA10
9.7	3.0	28.7	400±25%	-	380±25%	-	-
15.7	10.3	162.0	1100	-	1000	2000	-
15.7	10.3	161.7	-	-	-	-	-
19.2	11.3	217.0	1000	-	950	2000	5200+40/-30%
24.2	19.5	472.0	1600	-	1430	2800	-
24.2	19.5	472.0	1600	1400±25%	1430	2800	-
28.7	34.0	970.0	2500	-	-	-	-

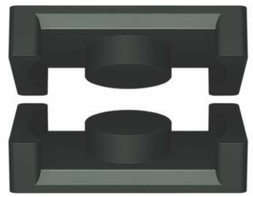
EPC Cores



Dimensions		Electrical Characteristics			Material Grades
E (mm)	F (mm)	Le mm	Ae mm^2	Ve mm^3	AL Values (±25%) in nH SFP4
5.00±0.10	2.65±0.10	22.5	13.6	306.0	950
5.70±0.30	4.8±0.30	29.4	13.7	402.1	850
5.70±0.30	4.8±0.30	29.4	13.7	402.1	850
5.50±0.25	4.8±0.30	29.4	13.7	402.1	850
6.20±0.10	4.55±0.15	46.0	14.0	655.0	660
7.70±0.15	5.4±0.20	41.2	23.2	955.0	1150
7.70±0.15	6.05±0.20	40.2	22.8	917.0	1150
8.20±0.20	7.25±0.20	43.3	23.0	995.9	1100
8.50±0.20	7.50±0.20	47.1	22.7	1070.6	930
8.20±0.20	7.40±0.20	45.1	21.6	974.0	1100
11.50±0.20	9.0±0.30	59.2	46.4	2748.0	1550
15.0±0.20	13.0±0.30	81.6	61.0	5035.0	1750

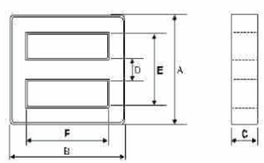
ER Cores





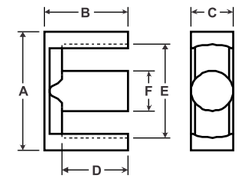
Geometry	Dimensions				
Type	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)
ER28/14/11	28.55±0.55	14.0±0.2	11.4±0.25	9.7±0.3	21.80min.
ER28/17/11	28.55±0.55	16.9±0.2	11.4±0.25	12.6±0.3	21.25min
ER29/17/11	29.50±0.60	16.9±0.3	11.4±0.30	12.6±0.2	22.5min.
ER35/20/11	35.0±0.6	20.7±0.3	11.3±0.2	14.7±0.3	25.6min
ER35/22/11	35.0±0.6	21.4±0.3	11.3±0.2	15.4±0.3	25.6min
ER42/22/15	42.0+1.0/-0.7	21.6±0.2	14.7±0.3	15.95±0.35	30.4min

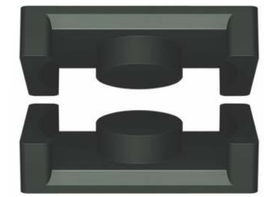
ET Cores



Geometry	Dimensions					
Type	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)
ET20/20/04	20.10±0.40	20.10±0.40	4.40±0.20	4.00±0.20	15.70min	15.70min
ET24/24/08	24.20±0.50	24.20±0.50	4.00±0.30	4.00±0.20	19.00min	19.00min
ET28/28/05	28.40±0.50	28.40±0.50	5.00±0.30	5.00±0.30	22.20min	22.20min
ET29/29/05	28.70±0.50	28.70±0.50	5.00±0.30	5.00±0.30	22.20min	22.20min
ET35/35/07	35.30±0.60	35.30±0.60	7.40±0.25	7.40±0.25	26.80min	26.80min

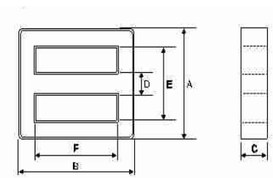
ER Cores



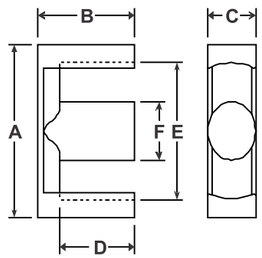


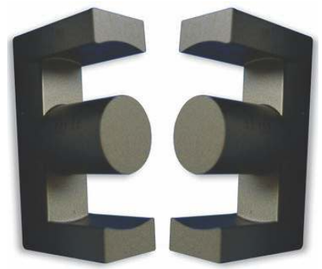
Dimensions	Electrical Characteristics			Material Grades	
F (mm)	Le mm	Ae mm^2	Ve mm^3	AL Values (±25%) in nH SFP4	SFP5
9.90±0.25	63.4	86.0	5460	-	2700
9.90±0.25	75.0	85.4	6400	2200	2400
9.90±0.30	77.27	84.0	6478	-	2450
11.3±0.25	89.6	111.0	9930	2500	2700
11.3±0.25	90.8	111.0	10800	-	2650
14.7±0.3	99.0	170.0	16800	3200	3700

ET Cores



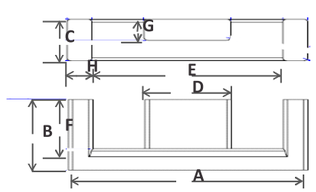
Electrical Characteristics			Material Grades		
Le mm	Ae mm^2	Ve mm^3	AL Values (±30%) in nH SFA07	SFA10	SFA121
52.1	17.6	917.0	3100	4400	4850
60.0	18.0	1098.0	2800	⩾3500	4300
70.0	27.0	1972.0	3100-4500	4500±25%	5800
71.4	28.02	2000.7	3600±25%	-	-
86.9	57.1	4962.0	5750 +30%/-20%	-	-

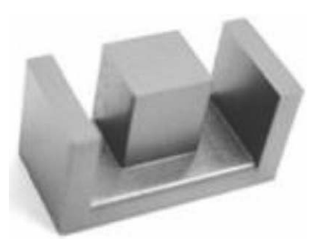




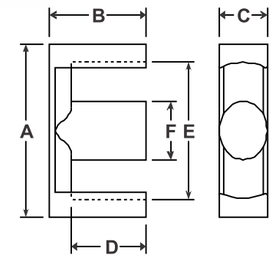
Geometry	Dimensions					
Type	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)
ETD29/16/10	30+0/-1.6	15.8±0.2	9.5±0.3	11.2±0.3	22.0min	9.5±0.3
ETD34/17/11	34.0+1.0/-0.6	17.5±0.4	11.1+0.0/-0.6	12.5±0.5	25.6min	11.1+0.0/-0.6
ETD39/20/13	38.9+1.1/-0.7	19.8±0.2	12.5±0.3	14.6±0.4	29.3min	12.5±0.3
ETD39/21/13	38.9+1.1/-0.7	21.0±0.2	12.5±0.3	15.8±0.4	29.3min	12.5±0.3
ETD39/22/13	38.9+1.1/-0.7	22.2±0.2	12.5±0.3	17.0±0.25	29.3min	12.5±0.3
ETD44/22/15	43.8+1.2/-0.8	22.3±0.2	14.8±0.4	16.5±0.4	32.5min	14.8±0.4
ETD49/25/16	48.5+1.3/-0.9	24.7±0.2	16.3±0.4	18.1±0.4	36.10min	16.3±0.4
ETD54/28/19	54.5±1.3	27.6±0.2	18.9±0.4	20.2±0.4	40.10min	18.9±0.4
ETD59/31/22	59.8±1.4	31.0±0.2	21.65±0.45	22.45±0.45	43.6min	21.65±0.45

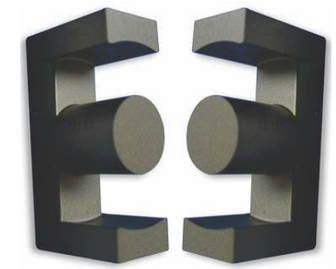
EVD Cores





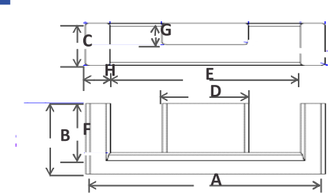
Geometry	Dimensions					
Type	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)
EVD16.5/7.4/4.7	16.50 ± 0.25	7.40 ± 0.15	4.75 ± 0.15	5.95 ± 0.15	13.10 ± 0.25	5.30 ± 0.10

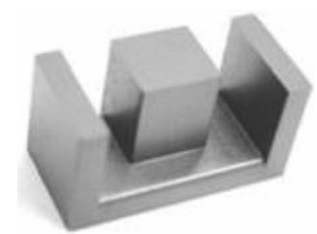




Electrical Characteristics			Material Grades		
Le mm	Ae mm^2	Ve mm^3	AL Values (±25%) in nH		
			SFP3	SFP4	SFP41
70.4	76.0	5350.0	2000	2200	-
78.6	97.1	7630.0	2400	2600	-
92.2	125.0	11500.0	2550	2700	-
97.5	125.0	12170.0	-	2650	-
102.0	125.0	12800.0	-	2550	-
103.0	173.0	17800.0	3300	3500	-
114.0	211.0	24100.0	3700	3800	-
127.0	280.0	35600.0	4200	4450	4600
139.0	368.0	51200.0	5000	5300	5500

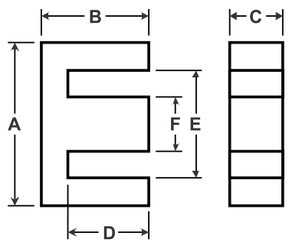
EVD Cores

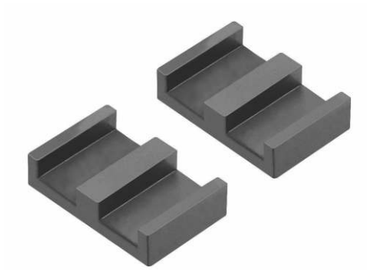




Dimensions			Electrical Characteristics			Material Grades
G (mm)	H (mm)	A-A1 (mm)	Le mm	Ae mm^2	Ve mm^3	AL Values (+/-25%) in nH SFP4
2.40+0.05/-0.10	1.60 min.	0.15max	37.22	16.72	622.4	1150

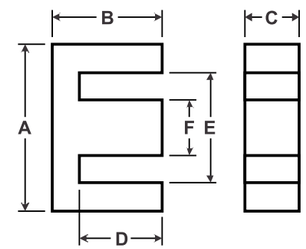
Planer E Cores

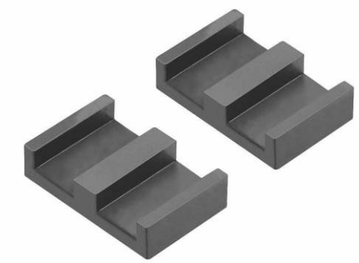




Geometry	Dimensions					
Type	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)
EE43-11-28P	43.2±0.90	11.0±0.15	29.9±0.60	6.90±0.15	34.7min	8.10±0.20

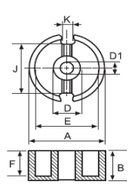
Planer E Cores





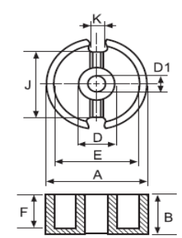
Electrical Characteristics			Material Grades
Le mm	Ae mm^2	Ve mm^3	AL Values in nH SFP4
67.1	229.0	15365.9	8300nH +30/-20%

Pot Cores

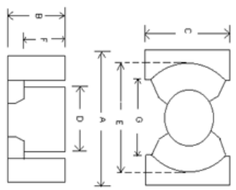


Geometry	Dimensions						
Type	A (mm)	B (mm)	D (mm)	E (mm)	F (mm)	J (mm)	K (mm)
POT9x5	9.15±0.15	2.65±0.05	3.80±0.10	7.62±0.15	1.87 ± 0.10	5.65±0.15	2.10±0.30
POT11x7	11.10±0.20	3.30±0.10	4.60±0.10	9.20±0.20	2.3±0.10	6.80±0.25	2.20±0.30
POT14x8	14.00±0.25	4.20±0.10	5.99max	11.60min	2.79min	9.50±0.60	3.30±0.60
POT18x11CH	17.90±0.30	5.3±0.10	7.40±0.15	15.25±0.25	3.80±0.10	11.55±0.30	3.20±0.30

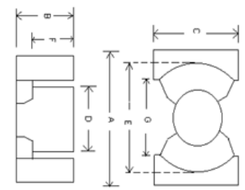
Pot Cores



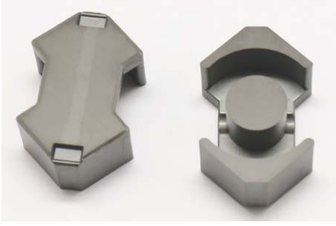
Dimensions	Electrical Characteristics			Material Grades		
D1 (mm)	Le mm	Ae mm^2	Ve mm^3	AL Values (±25%) in nH SFP4	SFP5	SFN4
-	13.52	12.76	172.52	1300	-	-
-	16.3	19	309	2000	1800	2000
-	21	29.9	628	2400	2000	2400
3.00±0.1	25.8	43.3	1120	2850	2430	2850



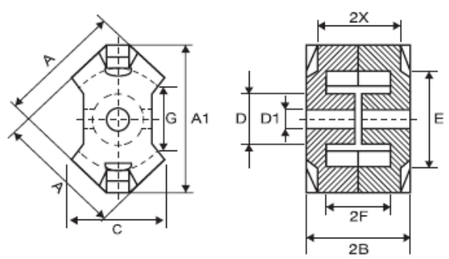
Geometry	Dimensions					
Type	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)
PQ20/10	20.50±0.40	5.10±0.10	14.00±0.40	8.70±0.30	18.00±0.40	2.15±0.15
PQ20/16	20.50±0.40	8.10±0.10	14.00±0.40	8.70±0.30	18.00±0.40	5.15±0.15
PQ20/20	20.50±0.40	10.20±0.20	14.00±0.40	8.80±0.20	18.00±0.40	7.20±0.20
PQ21/20	21.30±0.50	10.20±0.20	14.00±0.40	8.80±0.20	19.00±0.40	7.20±0.20
PQ26/20	26.50±0.45	10.20±0.20	19.00±0.45	12.00±0.25	22.05min	6.30±0.20
PQ26/25	26.50±0.45	12.40±0.20	19.00±0.45	12.00±0.25	22.05min	8.25±0.25
PQ27/20	27.30±0.46	10.10±0.15	19.00±0.45	12.00±0.20	22.50±0.46	5.75±0.15
PQ32/20	32.00±0.50	10.25±0.25	22.00±0.50	13.45±0.25	27.50±0.50	6.10±0.20
PQ32/25	32.00±0.50	12.60±0.20	22.00±0.50	13.45±0.25	27.50±0.50	8.50±0.20
PQ32/30	32.00±0.50	15.20±0.20	22.00±0.50	13.45±0.25	27.50±0.50	10.80±0.20
PQ35/35	35.10±0.60	17.40±0.15	26.0±0.50	14.35±0.35	32.0±0.50	12.50±0.15
PQ40/40	40.5±0.90	19.9±0.20	28.0±0.60	14.9±0.30	37.0±0.60	14.75±0.15
PQ50/50	50.0±0.70	25.0±0.25	32.0±0.50	20.0±0.35	44.0±0.70	18.05±0.15



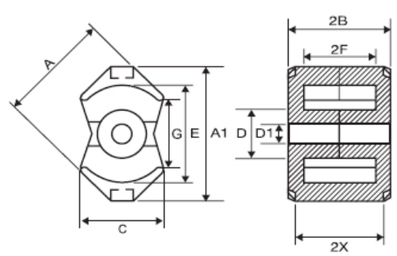
Dimensions	Electrical Characteristics			Material Grades		
G (mm)	Le mm	Ae mm²	Ve mm³	AL Values (±25%) in nH SFP4	SFP42	SFP5
12.00min	25.61	61.32	1570.41	-	4000	-
12.00min	37.60	61.90	2330.00	3880	-	-
12.00min	45.20	62.90	2843.00	2650	-	-
13.00min	46.52	62.21	2894.10	2650	-	-
16.00min	46.30	119.00	5509.70	5250	-	-
16.00min	54.70	120.70	6603.90	4500	-	-
15.50min	43.35	119.93	5198.80	6530	-	-
19.00min	49.15	156.14	7674.50	5400	-	-
19.00min	66.93	142.00	10996.07	5000	-	-
19.00min	74.60	161.00	11970.00	4500	-	-
23.5min	79.20	169.70	13440.00	4500+30/-20%	-	3300
28.00min	92.50	188.30	17430.00	4300+30/-20%	-	3200
31.50min	113.00	330.00	37270.00	6500+30/-20%	-	-



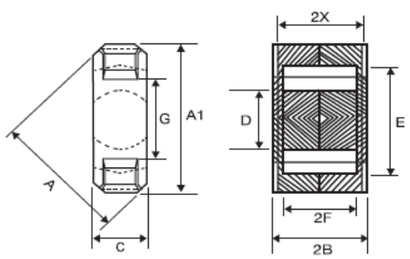
Geometry	Dimensions								
Type	A (mm)	A1 (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)
RM4	9.60±0.20	10.80±0.20	5.20±0.05	6.40±0.20	3.80±0.10	8.15±0.15	3.60±0.10	-	-
RM5	12.05±0.25	14.30±0.30	5.20±0.10	9.55±0.25	4.80±0.10	10.40±0.20	3.35±0.20	-	-
RM6	14.40±0.30	17.60±0.30	6.20±0.10	10.47±0.25	6.30±0.10	12.64±0.25	4.20±0.20	-	-
RM7	16.85±0.35	19.90±0.40	6.70±0.10	11.43±0.30	7.10±0.15	15.10±0.35	4.32±0.15	-	-
RM8	19.35±0.35	22.76±0.45	8.20±0.15	15.45±0.30	8.40±0.15	17.30±0.30	5.60±0.20	-	-
RM10	24.15±0.55	27.80±0.65	9.30±0.15	19.85±0.30	10.65±0.20	21.65±0.45	6.40±0.20	-	-
RM12	29.20±0.60	36.85±0.75	12.25±0.10	24.50±0.10	12.60±0.20	25.45±0.55	8.55±0.15	13.40min	15.85±0.25
RM14	34.80+0/-1.3	42.2+0/-1.2	15.10+0/-0.2	26.80±0.30	15.0+0/-0.5	29.00+1.0/-0	10.4+0.6/-0	17.00min	-



Type 1

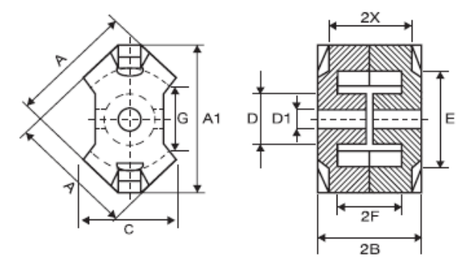


Type 2

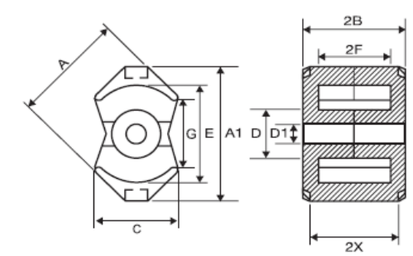


Type 3

Dimensions	Electrical Characteristics			Material Grades						Reference
				AL Values (+30/-25%) in nH						
2X (mm)	Le mm	Ae mm^2	Ve mm^3	SFP4	SFP41	SFP5	SFA05	SFN4	SFA121	Type
9.00±0.25	22.0	13.0	286.0	1100	-	1000±25%	1700	100	-	1
9.10±0.25	22.1	23.8	526.0	2000	-	1860±25%	3500	1850	7500min	1
10.40±0.25	28.6	36.6	1050.0	2400	-	2300±25%	4300	2380	7490min	2
12.50±0.30	30.3	50.7	1535.9	-	2400	-	-	-	-	-
14.40±0.25	38.0	64.0	2430.0	3300	-	2770	5700	2800	-	1
16.30±0.25	44.6	96.6	4310.0	4200	-	3600±25%	7600	-	-	2
22.10±0.25	60.6	144.0	8752.0	5550±25%	-	-	-	-	-	3
27.20±0.25	70.0	200.0	14000.0	6000	-	-	-	-	-	3



Type 1



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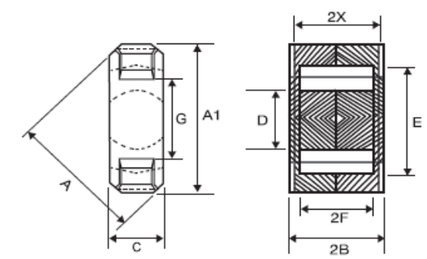
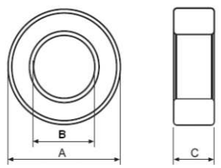


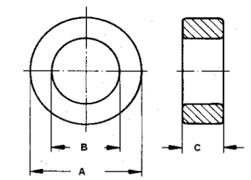
Type 3



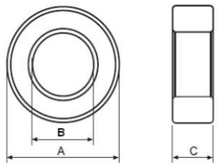
Geometry	Dimensions			Electrical Characteristics			
Type	A (mm)	B (mm)	C (mm)	Le mm	Ae mm²	Ve mm³	SFP4
T6/3/2C	6.90max	2.10min.	2.80max.	14.1	3.0	42.4	-
T6/3/3	6.0±0.3	3.0±0.3	3.0±0.2	14.1	4.5	63.6	1000
T6.35/3.81/3.18	6.35±0.3	3.81±0.3	3.18±0.2	16.0	4.0	64.5	790
T9/5/3	9.10±0.3	5.10±0.3	3.00±0.3	22.0	6.0	132.0	880
T9/5/3C	10.0max	4.20min	3.90max	22.0	6.0	132.0	880
T9.53/4.75/4.8	9.53±0.25	4.75±0.15	4.80±0.15	22.43	11.47	257.30	1670
T9.53/4.75/4.8C	10.38max	4.03min	5.53max	22.43	11.47	257.30	1670
T10/6/4	10.1±0.3	6.1±0.3	4.0±0.3	25.1	8.0	201.1	1020
T10/6/4C	11.00max	5.20min	4.90max	25.1	8.0	201.1	1020
T10/6/5	10.1±0.3	6.1±0.3	5.0±0.3	25.1	10.0	251.3	1270
T10/6/5C	11.00max	5.20min	5.90max	25.1	10.0	251.3	1270
T11.13/7.11/7.09C	11.63±0.50	6.61±0.5	7.49±0.5	27.7	14.0	387.4	-
T12.5/7.5/5	12.5±0.3	7.5±0.3	5.0±0.3	31.4	12.5	392.8	1250
T12.5/7.5/5C	13.40max	6.60min	5.90max	31.4	12.5	392.8	1250
T12.85/7.35/5	12.85±0.40	7.35±0.3	5.0±0.3	31.7	13.8	436.3	1400
T12.85/7.35/5C	13.85max	6.45min	5.90max	31.7	13.8	436.3	1400
T13/07/05C	14.00max	6.10min	5.0max	30.9	14.6	451.0	1250
T13.3/8.3/5	13.3±0.3	8.3±0.3	5.0±0.3	33.9	12.5	424.1	1150
T13.3/8.3/5C	14.20max	7.40min	5.90max	33.9	12.5	424.1	1150
T14/08/07	14.0±0.4	8.0±0.3	7.0±0.3	34.6	21.0	725.7	1956
T14/08/07C	15.00max	7.10min	7.90max	34.6	21.0	725.7	1956
T16/9.6/6.1	16.0±0.3	9.6±0.3	6.10±0.3	40.2	19.5	785.0	1520
T16/9.6/6.1C	16.90max	8.70min	7.00max	40.2	19.5	785.0	1520
T18/11/05C	18.9max.	10.10min.	5.8max	43.3	15.8	684.1	-
T18/10/07	18.0±0.3	10.0±0.3	7.0±0.3	44.0	28.0	1231.0	2054
T18/10/07C	18.90max	9.10min	7.90max	44.0	28.0	1231.0	2054
T 20/10/7	20.0±0.4	10.0±0.4	7.00±0.3	47.1	35.0	1649.3	2335
T 20/10/7C	21.0max	8.70min	7.00max	47.1	35.0	1649.3	2335

*C= Epoxy Coated Cores

Toroidal Cores

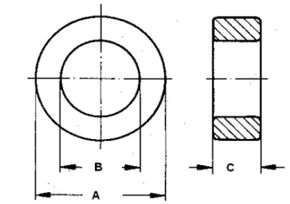


Material Grades								
AL Values (±25%) in nH								
SFP41	SFP42	SFP47	SFP5	SFA043	SFA05	SFA07	SFA10	SFA121
-	-	-	-	-	1450		4000	4800
-	-	-	800	1800	2200	2800	3180	3820
-	-	-	630	-	1590	2220	-	-
-	-	-	680	-	1760	2470	3520	4060
-	-	-	680	-	1760	2470	3520	4060
-	-	-		-	3340	4680	6680	7720
-	-	-		-	3340	4680	6680	7720
920	-	-	800	-	1900(±10%)	2850	4080	4900
920	-	-	800	-	1900(±10%)	2850	4080	4900
-	-	-	990	-	2550	3570	5000	5820
-	-	-	990	-	2550	3570	5000	5820
-	-	-		-				7230
-	-	-	1000	-	2500	3500	5000	6540
-	-	-	1000	-	2500	3500	5000	-
-	-	-	-	-	2790	3910	5580	-
-	-	-	-	-	2790	3910	5580	-
-	-	-	-	-				-
-	-	-	900	-	2300	3200	4600	5500
-	-	-	900	-	2300	3200	4600	5500
-	-	-	-	-	3920	5480	7840	9170
-	-	-	-	-	3920	5480	7840	9170
-	-	-	1220	-	3050	4270	6100	7320
-	-	-	1220	-	3050	4270	6100	7320
-	-	-	-	-	2300			
-	-	-	-	-	4110	5760	8230	9600
-	-	-	-	-	4110	5760	8230	9600
-	-	-	-	-	4670	6540	9300	11200
-	-	-	-	-	4670	6540	9300	11200



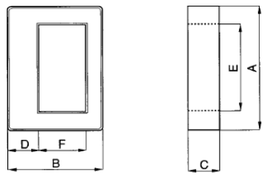
Geometry	Dimensions			Electrical Characteristics			
Type	A (mm)	B (mm)	C (mm)	Le mm	Ae mm^2	Ve mm^3	SFP4
T22/14/6.5	22.0±0.40	14.0±0.40	6.5±0.30	56.6	26.0	1470.3	1473
T22/14/6.5C	23.0max	13.00min	7.40max	56.6	26.0	1470.3	1473
T22/14/10	22.0±0.40	14.0±0.40	10.0±0.30	56.6	40.0	2262.0	2259
T22/14/10C	23.0max	13.00min	10.90max	56.6	40.0	2262.0	2259
T25/15/10	25.0±0.4	15.00±0.4	10.0±0.30	62.8	50.0	3141.6	2550
T25/15/10C	26.0max	14.00min	10.90max	62.8	50.0	3141.6	2550
T25/15/12	25.0±0.4	15.00±0.4	12.0±0.3	62.8	60.0	3769.9	3064
T25/15/12C	26.0max	14.00min	12.90max	62.8	60.0	3769.9	3064
T25/15/15	25.0±0.4	15.0±0.4	15.0±0.3	62.8	75.0	4172.4	3830
T25/15/15C	26.0max	14.00min	15.90max	62.8	75.0	4172.4	3830
T28/16/15	28.0±0.5	16.0±0.4	15.0±0.3	65.6	87.7	5755.3	-
T28/16/15C	29.1max	14.00min	15.90max	65.6	87.7	5755.3	-
T28/18/15	28.0±0.5	18.0±0.4	15.0±0.3	70.0	73.8	5162.3	-
T28/18/15C	29.1max	17.00min	15.90max	70.0	73.8	5162.3	-
T29/19/14C	30.20max	18.80min	15.20max	73.2	69.0	5048.1	-
T31/19/13	31.0±0.5	19.0±0.5	13.0±0.4	78.5	78.0	6126.1	3180
T31/19/13C	32.10max	17.90min	14.00max	78.5	78.0	6126.1	3180
T31/19/15C	32.10max	17.90min	16.00max	75.5	88.2	6659.8	-
T36/23/15	36.0±0.6	23.45±0.5	15.0±0.4	92.7	97.5	9036.0	3210
T36/23/15C	37.20max	22.35min	16.00max	92.7	97.5	9036.0	3210
T36/23/17	36.0±0.70	23.0±0.5	17.0±0.4	89.7	108.7	9742.0	-
T41.8/26.2/12.5	41.8±1.0	26.2±0.6	12.5±0.3	103.0	95.8	9862.0	-
T50/30/20	50.0±1.0	30.0±0.65	20.0±0.50	120.4	195.7	23567.0	-
T55.5/32.6/18	55.5±1.10	32.6±1.10	18.0±0.5	138.3	206.1	28507.8	-
T56/32/18C	58.0max	30.55min	19.30max	131.3	210.5	27625.9	4200+30/-20%
T63/38/25	62.80±1.6	37.60±1.20	25.0±0.6	158.7	312.5	49578.4	-
T63/38/25C	65.00max	35.80min	26.20max	-	-	-	-
T63/38/25C	65.10max	36.40min	26.30max	152.1	305.9	46528.0	-
T140/106/25	140.0±3.0	106.0±2.0	25.0±1.0	381.5	422.3	161083.0	-
T140/106/25C	143.80max	103.20min	26.80max	381.5	422.3	161083.0	-

*C= Epoxy Coated Cores



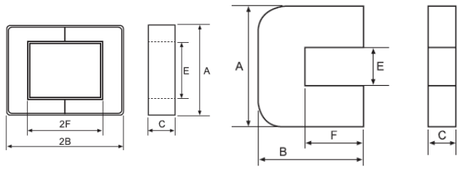
Material Grades								
AL Values (±25%) in nH								
SFP41	SFP42	SFP47	SFP5	SFA043	SFA05	SFA07	SFA10	SFA121
-	-	-	-	-	2940	4110	5870	6930
-	-	-	-	-	2940	4110	5870	6930
-	-	-	1780	-	4520	6330	9040	10670
-	-	-	1780	-	4520	6330	9040	10670
-	-	-	2000	-	5110	7150	10220	11000
-	-	-	2000	-	5110	7150	10220	11000
-	2160nH ± 25%	-		-	6130	8580	12260	14400
-	-	-	-	-	6130	8580	12260	14400
-	-	-	-	-	7660	10730	15330	17500
-	-	-	-	-	7660	10730	15330	17500
-	-	-	-	-	-	-	16000	-
-	-	-	-	-	-	-	16000	-
-	-	-	-	-	-	-	13000	-
-	-	-	-	-	-	-	13000	-
-	-	-	-	-		8169+30/-20%	-	-
-	-	-	2500	-	6360	8910	12730	14500
-	-	-	2500	-	6360	8910	12730	14500
-	-	-	-	-			14000	
-	-	-	-	-	6430	9000	12860	14500
-	-	-	-	-	6430	9000	12860	14500
-	-	4550nH +30/-20%	-	-	-		-	-
-	-	-	-	-	-	7000	-	-
-	-	6100nH +30/- 20%	-	-	-	-	-	-
-	-	-	-	-	9365	-	-	-
-	-	-	-	-	-	-	-	-
-	-	-	-	-	12500	17700	-	-
-	-	-	-	-	12500	17700	-	-
-	-	-	-	-	12600+30/-20%	-	-	-
-	-	-	-	-	7700±30%	-	-	-
-	-	-	-	-	7700±30%	-	-	-

UT Cores



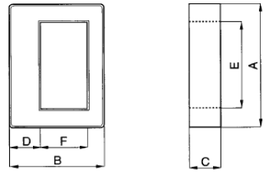
Geometry	Dimensions					
Type	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)
UT20	20.60±0.30	14.10±0.25	4.60±0.20	4.10±0.20	15.70min	7.35min
UT25	25.60±0.40	17.60±0.30	5.20±0.25	5.20±0.15	19.30min	8.70min
UT30	30.00±0.40	19.80±0.30	6.40±0.25	6.40±0.15	22.40min	8.90min

UU Cores



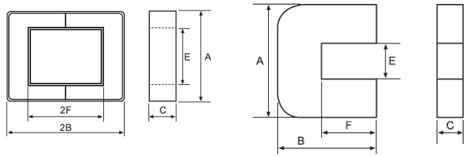
Geometry	Dimensions					Electrical Characteristics	
Type	A (mm)	B (mm)	C (mm)	E (mm)	F (mm)	Le mm	Ae mm^2
UU9.8	9.80±0.20	7.20±0.10	2.70±0.20	4.20min	4.20±0.20	34	8
UU9.8 Laker	9.80±0.30	7.10±0.30	2.70±0.30	4.20min	4.30±0.30	34	8
UU10.5	10.50±0.25	8.00±0.30	5.00±0.15	5.35min	5.30±0.30	40	13
UU10.5 Laker	10.50±0.25	8.00±0.30	5.00±0.15	5.50min	5.30±0.30	40	13
UU12	12.00±0.30	7.90±0.10	4.45±0.15	7.20min	5.65±0.10	44.54	10.14
UU15	15.20±0.70	11.40±0.50	6.45±0.25	5.20min	6.25±0.35	51	33
UU19	19.05±0.35	17.00±0.15	2.00±0.10	4.35±0.10	11.60±0.15	70.6	12.9
UU93/76/16	93±1.8	76±0.5	16±0.5	34.6min.	48±0.9	354	448
UU93/76/20	93±1.8	76±0.5	20±0.5	34.6min.	48±0.9	354	560
UU93/76/30	93±1.8	76±0.5	30±0.6	34.6min.	48±0.9	354	840
U101/76/30	101±1.8	76±0.5	30±0.6	45.0min.	48±0.9	368	840
U141/78/30	141±0.5	78.5±0.5	30±0.1	50min.	33.5±1	377	1350

UT Cores



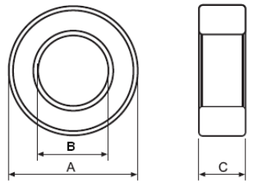
Electrical Characteristics			Material Grades		
Le mm	Ae mm^2	Ve mm^3	AL Values (±30%) in nH SFA07	SFA10	SFA121
53	13	688	2140	3000	3700
68	18	1203	2350+40%-20%	3350	-
77	27	2068	3150+40%-20%	4500	-

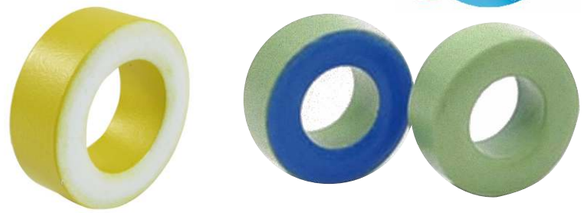
UU Cores



	Material Grades						Reference
Ve mm^3	AL Values (±25%) in nH SFP4	SFP5	SFA05	SFA07	SFA10	SFA121	Type
271.11	500	450	930	1300	1309min	-	1
271.11	-	-	-	2500	-	-	1
518	720	650	1220	1650	2800min	-	1
518	-	-	-	-	⩾3500	-	
451.63	550	-	-	-	-	-	1
1673	1350	1300	2680	3320	-	-	1
910.74	500	-	-	-	-	-	2
159000	3100	-	-	-	-	-	1
198000	3900	-	-	-	-	-	1
297000	5700	-	-	-	-	-	1
310800	5700	-	-	-	-	-	1
508950	8900	-	-	-	-	-	1

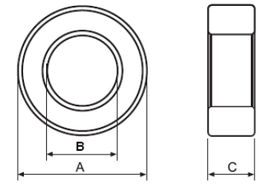
Iron Powder Cores

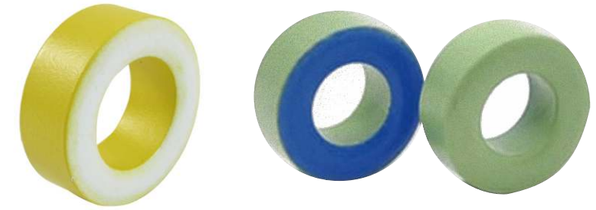




Geometry	Dimensions		
Type	A (mm)	B (mm)	C (mm)
SFT50-26	12.70±0.50	7.70±0.50	4.83±0.50
SFT60-26	15.20±0.50	8.53±0.50	5.94±0.50
SFT80-26	20.20±0.50	12.60±0.50	6.35±0.64
SFT106-26	26.90±0.50	14.50±0.50	11.10±0.64
SFT131-26	33.00±0.50	16.30±0.50	11.10±0.50
SFT184-26	33.00±0.50	19.80±0.50	11.10±0.64
SFT130-52	46.70±0.64	24.10±0.64	18.00±0.76

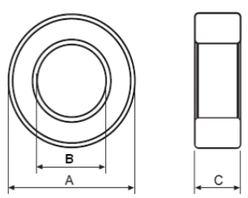
Iron Powder Cores





Electrical Characteristics			Material Grades	
Le mm	Ae mm^2	Ve mm^3	AL Values (±10%) in nH Yellow / White -26	Green / Blue -52
3.19	0.112	0.358	33	-
3.74	0.187	0.699	50	-
5.14	0.231	1.187	46	-
6.49	0.659	4.280	93	-
7.72	0.885	6.840	116	-
8.28	0.698	5.780	-	79
8.28	0.698	5.780	169	-

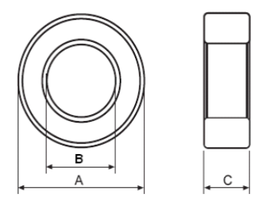
Sendust Cores



Geometry	Dimensions		
Type	A (mm)	B (mm)	C (mm)
T27.7/14/12C	27.7max	14.0min	12.0max
T33.83/19.3/12.2C	33.83max	19.3min	12.2max
T47.6/23.3/19C	47.6max	23.3min	19.0max
T78.9/47.96/17.2C	78.90max	47.96min	17.2max

*C= Epoxy Coated Cores (Coating color Black)

Sendust Cores



Electrical Characteristics			Material Grades			
Le mm	Ae mm^2	Ve mm^3	AL Values (±10%) in nH SFNS075	SFNS125	SFNS060	SFNS090
63.5	65.4	4154.0	37.6	62.8	-	-
81.5	70.3	5732.0	-	132.9	-	-
107.4	199.0	107.4	-	252.8	57.5	-
200.0	227.0	43531.0	-	445	121.5	181.8

Index of Definitions & Equations

1) Initial Permeability, μ_i
2) Effective Permeability, μ_e
3) Saturation Flux Density, B_s (T)
4) Residual Magnetic Flux Density, Br (T)
5) Coercivity, Hc (A/m)
6) Loss Factor, tanδ
7) Relative Loss Factor, tanδ/μ
8) Hysteresis Material Constant, ηB (10^{-6}/mT)
9) Temperature Coefficient, $\alpha\mu$ (K^{-1})
10) Relative Temperature Coefficient, $\alpha_{\mu r}$ (K^{-1})
11) Curie Temperature, Tc (°C)
12) Resistivity, ρ (Ωm)
13) Density, d (kg/m³)
14) Power Loss density, Pc (kW/m³)
15) Inductance Factor, AL (nH/N²)

1) μ_i (Initial Permeability)
2) Toroidal Permeability
3) μ_e Effective Permeability
4) A_L Inductance Factor
5) H Magnetic Field Strength
6) Peak AC Flux Density
7) L_e Effective Magnetic Path Length of Toroidal Cores
8) A_e Effective Cross-sectional Area
9) Q Quality Factor

Definitions

1) Initial Permeability, μ_i

This is the limit value of B/H where H is indefinitely close to zero at the initial magnetization curve of a ferromagnetic substance.

$$\mu_i = \frac{1}{\mu_0} \lim_{(H \to 0)} \frac{B}{H}$$

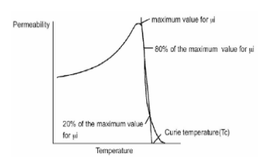
Where	μ_0	Permeability in Vacuum ($4\pi x10^{-7}$H/m)
	H	Magnetic Field Strength (A/m)
	B	Magnetic Flux Density (T)

2) Effective Permeability, μ_e

Effective Permeability of a core forming a closed circuit where leakage flux is negligibly small.

$$\mu_e = \frac{L_e}{\mu_0 A_e N^2}$$

Where	L	Self Inductance of Coil with Core (H)
	N	Number of Turns in Coil
	L_e	Effective Magnetic Path Length of Core (m)
	A_e	Effective cross sectional area of Core (m²)



3) Saturation Flux Density, B_s (T)

Saturation flux density is the maximum attainable flux density when a very high magnetic field is applied to a soft magnetic material as shown in the figure below.

4) Residual Magnetic Flux Density, B_r (T)

This is the amount of residual magnetic flux density retained by the core after the magnetic field is weakened and finally removed, as shown in the figure above.

5) Coercivity, H_c (A/m)

This is the strength of the magnetic field whereby the residual flux density becomes zero under the intensification in the opposite direction of the magnetic field, as shown in the figure above.

Definitions

6) Loss Factor, tanδ

The loss factor can be split up into three parts as tanδ= tanδh+ tanδe+ tanδr

Where	tanδh	Hysteresis loss
	tanδe	Eddy-current loss
	tanδr	tanδr Residual loss

7) Relative Loss Factor, tanδ/μ

This is the amount of loss per unit permeability and is defined as below.
tanδ/μ_i (for magnetic material)
tanδ/μe (where gaps are added to the magnetic circuit)

8) Hysteresis Material Constant, ηB (10^{-6}/mT)

Hysteresis material constant characterizes the change of the hysteresis loss of the material when the flux density is increased.

$$\eta B = \frac{\Delta \tan\delta}{\mu e \Delta B}$$

Where	tanδ	Loss factor
	μe	Effective Permeability
	B	Magnetic Flux Density (mT)

9) Temperature Coefficient, $\alpha\mu$(K^{-1})

This is the fractional difference of permeability per ºK in a temperature range from T_1 to T_2 ($T_2 > T_1$)

$\alpha_\mu = (\mu_2 - \mu_1)/\mu_1(T_2 - T_1)$

Where	μ_1	Permeability at temperature T_1
	μ_2	permeability at temperature T_2

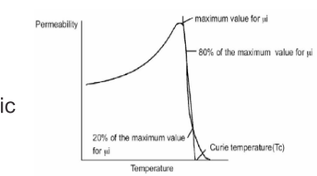
10) Relative Temperature Coefficient, $a_{\mu r}$ (K^{-1})

This is the temperature coefficient per unit permeability

$a_{\mu r} = (\mu_2 - \mu_1)/\mu_1^2(T_2 - T_1)$

The temperature coefficient of an actual core is obtained from below

$a_{\mu r} = a_{\mu r} x \mu_e$



11) Curie Temperature, Tc (°C)

The Curie temperature Tc is defined as the temperature at which the magnetic core changes from the ferromagnetic to the paramagnetic state.

12) Resistivity, ρ (Ωm)

This is the electrical resistance per unit length and cross-sectional area of a magnetic core.

13) Density, d (kg/m³)

This is the weight per unit volume of a magnetic core.

d = W/V

Where:	W	Weight of magnetic core (kg)
	V	Volume of magnetic core (m³)

14) Power Loss density, Pc (kW/m³)

Power loss denotes the loss under a magnetization condition featuring a high frequency and a large amplitude. Operating magnetic flux density is generally expressed for a sinusoidal wave as below.

$Bm = E/(4.44f\ NA_e)$

Where	B_m	Peak value of magnetic flux density (T)
	E	Voltage effective value applied to test coil (V)
	f	Frequency (Hz)
	N	Number of coil turns
	A_e	Effective cross-sectional area of core (m²)

15) Inductance Factor, AL (nH/N²)

$A_L = L/N^2$

Where	A_L	Self-inductance of coil with core (H)
	N	Number of coil turns

The inductance factor is generally united by 10^{-9} H/N² (nH/N²)

Equations

1) μ_i (Initial Permeability)

$$\mu_i = \frac{1}{\mu_0} \lim_{\Delta H \to 0} \left(\frac{\Delta B}{\Delta H}\right) \qquad \mu_0 : (4\pi \times 10^{-7}\ H/m)$$

2) Toroidal Permeability

$$\mu = \frac{1000 L . l_e}{4\pi N^2 A_e}$$

Where	L	Inductance (μH)
	μ	Permeability
	N	No of Turns
	A_e	Effective Cross-Sectional Area (cm²)
	l_e	Effective Magnetic Path Length (cm)

3) μ_e Effective Permeability

$$\mu_e = \frac{1000 L}{4\pi N^2} \sum \frac{l}{A}$$

Where	L	Inductance (μH)
	μ	Permeability
	N	No of Turns
	l	Effective Magnetic Path Length (cm)
	A	Effective Cross-Sectional Area (cm²)

4) AL Inductance Factor

$A_L = L/N^2$

A_L: nH/N²

Where	L	Inductance
	N	No of Turns

5) Magnetic Field Strength

$$H = \frac{0.4\pi N I}{l_e}$$

Where	H	Magnetic Force (Oe)
	N	No of Turns
	I	Current (A)
	l_e	Effective Magnetic Path Length (cm)

6) Peak AC Flux Density

$$B_{max} = \frac{E_{rms} 10^8}{4.44 f A_e N}$$

Where	B	Peak AC Flux Density (Gauss)
	F	Frequency (Hz)
	A_e	Effective Cross-Sectional Area cm²
	E_{rms}	RMS Voltage (V)

7) L_e Effective Magnetic Path Length of Toroidal Cores

$$l_e = \frac{\pi(OD-ID)}{\ln\left(\frac{OD}{ID}\right)}$$

Where	OD	Outer Diameter (cm)
	ID	Inner Diameter (cm)
	l_e	Effective Magnetic Path Length (cm)

8) A_e Effective Cross-sectional Area

$$A_e = \frac{(OD-ID)}{2} \times Ht \times K$$

Where	OD	Outer Diameter (cm)
	ID	Inner Diameter (cm)
	Ht	Height (cm)
	K	Coefficient Relative to the shape of the edges

9) Quality Factor (Q)

$$Q = \frac{\omega L}{R_{dc} + R_{ac} + R_{cd}}$$

Where	Q	Quality Factor
	L	Inductance (H)
	$\omega = 2\pi f$	2π Frequency (Hz)
	R_{dc}	DC Winding Resistance (Ω)
	R_{ac}	Resistance due to core loss (Ω)
	R_{cd}	Resistance due to dielectric loss of winding (Ω)

Speedofer Certifications & Recognitions

QMS

KVQA

Certificate of Registration

(Quality Management System)

KVQA CERTIFICATION SERVICES PVT. LTD.

This is to certify that the Quality Management System of

SPEEDOFER COMPONENTS PVT. LTD.

Plot No. 101-102, Ecotech-III, Toy City,
Greater Noida - 201306, U.P., India.

Has been found to be of the Quality Management System Standard

AS/NZS ISO 9001:2015/ISO 9001:2015

This certificate is valid for the following product or service range

Manufacturer of Ferrite Cores.

1st Surveillance Due On: 21/11/2017: Done On:
2nd Surveillance Due On: 21/11/2018: Done On:

Certificate No: IQSC201612029
Date Of Issue: 21, December, 2016
Valid Until: 20, December, 2019*

Issued by
Authorised signatory KVQA

IAF

JAS-ANZ

JAS-ANZ is the government-appointed accreditation body for Australia and New Zealand responsible for providing accreditation of conformity assessment bodies (CABs) in the fields of certification and inspection. Accreditation by JAS-ANZ demonstrates the competence and independence of KVQA.

Accredited by a member of IAF's MLA for Quality Systems

To Check the Status of the Certification kindly log on to www.kvqa.in

F-300, Sector 63, Noida U.P., India. Ph-0120-2757040, 2757041, email: delhi@vqanda.com

*Subject to successful completion of surveillance audits

MS400013IN

www.jas-anz.org

EMS

KVQA

Certificate of Registration

(Environment Management System)

KVQA CERTIFICATION SERVICES PVT. LTD.

This is to certify that the Environment Management System of

SPEEDOFER COMPONENTS PVT. LTD.

Plot No. 101-102, Ecotech-III, Toy City,
Greater Noida - 201306, U.P., India.

Has been found to the Environment Management System Standard

AS/NZS ISO 14001:2015/ISO 14001:2015

This certificate is valid for the following product or service range

Manufacturer of Ferrite Cores.

1st Surveillance Due On: 21/11/2017: Done On:
2nd Surveillance Due On: 21/11/2018: Done On:

Certificate No: IESC201612008
Date Of Issue: 21, December, 2016
Valid Until: 20, December, 2019*

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OHSAS

KVQA

Certificate of Registration

(Occupational Health & Safety Management System)

KVQA CERTIFICATION SERVICES PVT. LTD.

This is to certify that the Occupational Health & Safety Management System of

SPEEDOFER COMPONENTS PVT. LTD.

Plot No. 101-102, Ecotech-III, Toy City,
Greater Noida - 201306, U.P., India.

Has been found to the Occupational Health & Safety Management System Standard

OHSAS 18001:2007

This certificate is valid for the following product or service range

Manufacturer of Ferrite Cores.

1st Surveillance Due On: 21/11/2017: Done On:
2nd Surveillance Due On: 21/11/2018: Done On:

Certificate No: IOSC201612008
Date Of Issue: 21, December, 2016
Valid Until: 20, December, 2019*

Issued by
Authorised signatory KVQA

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DSIR R&D Recognition

TELEGRAM : SCINDRECH
दूरभाष/TEL : 26960819, 26567373
: 26566884, 26562133
: 26566887, 26562144
: 26562134, 26562122 (EPBAX)
फैक्स/FAX : 26960029, 26529745
Website : http://www.dsir.gov.in

सत्यमेव जयते

सूचना का अधिकार

भारत सरकार
विज्ञान और प्रौद्योगिकी मंत्रालय
वैज्ञानिक और औद्योगिक अनुसंधान विभाग
टेक्नोलॉजी भवन
नया महरौली मार्ग, नई दिल्ली – 110 016

GOVERNMENT OF INDIA
MINISTRY OF SCIENCE AND TECHNOLOGY
Department of Scientific and Industrial Research
Technology Bhavan
New Mehrauli Road, New Delhi - 110 016

No. TU/IV-RD/3837/2015 Dated: 27 April, 2015

To

M/s. Speedofer Components Private Limited
22, Chitra Vihar
Near Preet Vihar Metro Station
Delhi – 110 092

Subject: RECOGNITION OF YOUR IN-HOUSE R&D UNIT(s)

Dear Sirs,

This has reference to your application for recognition of your In-House R&D unit(s) by the Department of Scientific and Industrial Research.

2. This is to inform you that it has been decided to accord recognition to the In-House R&D unit(s) of your firm at **Plot No.101-102, Toy City Ecotech-III, Greater Noida, Gautam Buddha Nagar (UP)** from **24.03.2015** to **31.03.2017.** Terms and conditions pertaining to this recognition are given overleaf.

3. Kindly acknowledge the receipt of this letter.

Yours faithfully,

(K.V.S.P. Rao)
Scientist - 'G'

DUNS NUMBER

dun & bradstreet

GROWING RELATIONSHIPS THROUGH DATA

This is to certify that

Speedofer Components Private Limited

Plot No.101 & 102, Toy City, Ecotech III,
Greater Noida - 201 306, Uttar Pradesh, India.

is now part of the
Dun & Bradstreet Global Database
and has been assigned the

D&B D-U-N-S® Number: 67-738-4917

For Dun & Bradstreet Information Services India Private Limited

Authorized Signatory

26th October, 2015

?The fact that this business is registered in the D&B database should not be construed as suggesting that credit or any other ?nancial or business transaction should be approved, denied, restricted or delayed. It only signi?es that there is suf?cient information in the database to assign a D&B D-U-N-S Number.?

D&B D-U-N-S ® Number is a registered number of Dun & Bradstreet Corporation, USA.

Speedofer Senior Management

Mr. B S Randhawa :

Chairman & Managing Director of Speedofer Components Pvt. Ltd., Bramhajeet Singh Randhawa is an entrepreneur who has over 2 decades of experience in Soft Ferrite Cores Industry.

Forayed into Soft Ferrite Cores manufacturing by setting up Speedofer Components Pvt. Ltd. in 2007 which has an expanded unit and a factory in Greater Noida, India.

Has a vision to grow together with the Clients and take Employees, Business Partners and Suppliers along to make Speedofer most reliable global supplier.

Found Hob-Nob Electronics Pvt. Ltd. in New Delhi in 1994 as an authorized Distributor to EPCOS Ferrite Cores in India.

An Executive Committee member of ELCINA that represents Electronics Industry.

Reachable at bsr@speedofer.com

Mr. A N Sinha:

Executive Director of Speedofer Components Pvt. Ltd., Ambar N Sinha was the Managing Director of EPCOS, India.

Over 15 years association with EPCOS and built up the company from scratch into a world class manufacturing facility for Soft Ferrites Cores. It is because of the rapid growth of EPCOS that the Indian Ferrite Industry is thriving today.

Graduated from IIT - Kharagpur, has techno-commercial backgrounds and evolved Six Sigma, TPM, Lean Manufacturing Processes across the Organizations he served.

Motivates his colleagues by extending his expertise in Business Excellence & Strategies and ever helpful in systematic operations.

Reachable at ans@speedofer.com

Mr. Probal Mukherjee:

Technical Head of Speedofer Components Pvt. Ltd., Mr. Mukherjee was General Manager, R&D in EPCOS, India.

Actively associated with Speedofer Components Pvt. Ltd. in the field of Quality, Customer Support and customized instruments for testing different applicable characteristics of Ferrites Cores.

Graduated from IIT - Kharagpur, fondly known as “Father of Ferrites” in India who also has wide global experience with having worked in Far East, Europe and the Americas. Member and Convenor of IEC for standardisation.

Reachable at probal@speedofer.com