

				Power/Switching transformers, Differential mode chokes, Output chokes						Wideband & Pulse transformers, Common-mode chokes, current sensing, RFI suppression									
Parameter	Symbol	Standard Conditions of test	Unit	F47	F44	F5	F48	F5A	F5C	F9	F9C	F10	F57	F39					
Initial Permeability (nominal)	μ_i	B<0.1mT 10kHz 25°C	-	1800 ± 20%	1900 ± 20%	2000 ± 20%	2300 ± 20%	2500 ± 20%	3000 ± 20%	4400 ± 20%	5000 ± 20%	6000 ± 20%	7500 ± 25%	10000 ±30%					
Saturation Flux Density (typical)	B_{sat}	H=796 A/m = 10Oe Static 25°C 100°C	mT	470 350	500 400	470 350	480 380	470 350	460 350	380 -	460 -	380 -	380 -	380 -					
Remanent Flux Density (typical)	B_r	H→0 (from near Saturation) 10kHz 25°C	mT	130	270	200	150	150	150	180	170	100	250	200					
Coercivity (typical)	H_c	B→0 (from near Saturation) 10kHz 25°C	A/m	24	27	21	20	15	18	13	13	11	17	16					
Loss Factor (maximum)	$\tan \delta_{(r+s)}$ μ_i	B<0.10mT 25°C 10kHz 100kHz 200kHz 1MHz	10 ⁻⁶	-	-	-	-	-	-	-	-	-	-	-					
				-	-	-	-	-	-	20	20	20	-	-					
				-	-	-	-	-	-	-	-	-	-	-	-				
				-	-	-	-	-	-	-	-	-	-	-	-				
Temperature Factor	$\frac{\Delta \mu}{\mu_i^2 \cdot \Delta T}$	B<0.10mT +25°C to +55°C 10kHz	10 ⁻⁶ / °C	-	-	-	-	-	-	0 to 2	-1 to +2	-1 to +2	-	-					
Curie Temperature (minimum)	Θ_c	B<0.1mT 10kHz	°C	200	230	200	220	200	180	130	160	130	125	125					
Resistivity (typical)	ρ	1V/cm 25°C	ohm-cm	100	100	100	100	100	100	50	50	50	100	100					
Amplitude Permeability (minimum)	μ_a	400mT 320mT 340mT 25°C 100°C 100°C	-	2000 2500 -	2500 - 1900	2400 1825 -	2500 2000 -	2400 1825 -	2400 -	-	Data is derived from measurements on toroidal cores These values cannot be directly transferred to products of another shape and size. The product related data can be take only from the relevant product specifications.								
Total Power Loss Density (maximum)	P_v	200mT; 16kHz 25°C	mW/cc	-	-	120	-	120	120										
		200mT; 16kHz 60°C		-	-	110	-	110	120										
		200mT; 16kHz 100°C		-	-	110	-	110	110										
		200mT; 25kHz 25°C		120	200	-	-	-	-										
		200mT; 25kHz 60°C		-	-	190	-	190	190										
		200mT; 25kHz 100°C		100	130	190	-	190	190										
		100mT; 100kHz 25°C		110	250	-	-	-	-										
		100mT; 100kHz 100°C		80	160	-	70	-	-										
		200mT; 100kHz 100°C		-	750	-	380	-	-										
		50mT; 400kHz 25°C		150	-	-	-	-	-										
50mT; 400kHz 100°C	150	-	-	-	-	-													



				Suppression/ Chokes general purpose grades			Signal filtering, suppression applications, Proximity switches		
Parameter	Symbol	Standard Conditions of test	Unit	F6	F7	F8	P10	P11	P12
Initial Permeability (nominal)	μ_i	B<0.1mT 10kHz 25°C	-	1800 ±20%	1800 min	1200 min	2000 ±20%	2250 ± 20%	2000 ±20%
Saturation Flux Density (typical)	B_{sat}	H=796 A/m = 10Oe Static 25°C	mT	450	390	380	- -	- -	- -
Remanent Flux Density (typical)	B_r	H→0 (from near Saturation) 10kHz 25°C	mT	-	-	-	-	70	35
Coercivity (typical)	H_c	B→0 (from near Saturation) 10kHz 25°C	A/m	-	-	-	-	18	7
Loss Factor (maximum)	$\frac{\tan \delta}{\mu_i}$ (r+e)	B<0.10mT 25°C	10 ⁻⁶	-	8	-	6 15	1.5 5	0.8 2.5
		20kHz		-	-	-	-	-	
		100kHz		-	-	-	-	-	
		200kHz 1MHz		-	-	-	-	-	
Temperature Factor	$\frac{\Delta \mu}{\mu_i^2 \cdot \Delta T}$	B<0.10mT +25°C to +55°C 10kHz	10 ⁻⁶ / °C	-	0 to +2	-	0 to +2	0.5 to 1.5	0.4 to 1.0
Curie Temperature (minimum)	Θ_c	B<0.1mT 10kHz	°C	180	150	130	150	150	150
Disaccommodation Factor (max)	$\frac{\Delta \mu}{\mu_i^2 \cdot \log_{10}(t_2/t_1)}$	B<0.25mT 50°C 10 to 100 mins	10 ⁻⁶	-	-	-	8	4	3
Hysteresis Material Constant (max)	η_b	B from 1.5 to 3mT 10kHz 25°C	10 ⁻⁶ /mT	-	-	-	2.4	0.8	0.45
Resistivity (typical)	ρ	1V/cm 25°C	ohm-cm	100	100	100	100	100	100
Amplitude Permeability (minimum)	μ_a	400mT 320mT 340mT 25°C 100°C 100°C	-	1200 1200 -	- - -	- - -	<p>Data is derived from measurements on toroidal cores.</p> <p>These values cannot be directly transferred to products of another shape and size. The product related data can be take only from the relevant product specifications.</p>		
Total Power Loss Density (maximum)	P_v	200mT; 16kHz 25°C	mW/cc	150	-	-			
		200mT; 16kHz 60°C		150	-	-			
		200mT; 16kHz 100°C		150	-	-			
		200mT; 25kHz 25°C		-	-	-			
200mT; 25kHz 60°C	-	-	-						
200mT; 25kHz 100°C	-	-	-						