

■ Nickel-Zinc ferrites for industrial and Professional Applications

Applications Guide				Short or VHF antennae, HF inductors		
Parameter	Symbol	Standard Conditions of test	Unit	GL9	GL2F	GL5E
Initial Permeability (nominal)	μ_i	B<0.1mT 10kHz 25°C	-	50 ±25%	30 ±25%	15 ±25%
Saturation Flux Density (typical)	B_{sat}	H=796 A/m =10 Oe Static 25°C	mT	-	-	220
Remanent Flux Density (typical)	B_r	H→0(from near Saturation) 10kHz 25°C	mT	-	-	135
Coercivity (typical)	H_c	B→0(from near Saturation) 10kHz 25°C	A/m	-	-	1600
Loss Factor (maximum)	$\frac{\tan \delta_{(pre)}}{\mu_i}$	B<0.1mT 25°C	100kHz	-	-	-
			250kHz	-	-	-
			400kHz	-	-	-
			500kHz	-	-	-
			1MHz	50	-	-
			2MHz	50	-	-
			3MHz	55	-	-
			5MHz	65	-	-
			10MHz	75	80	-
			15MHz	100	-	-
			20MHz	125	-	-
40MHz	300	-	-			
100MHz	-	250	225			
200MHz	-	-	-			
Temperature Factor	$\frac{\Delta \mu}{\mu_i^2 \Delta T}$	B<0.1mT 10kHz +25°C to +55°C	$10^{-6}/^\circ\text{C}$	10 to 15	30	-
Curie Temperature (minimum)	Θ_c	B<0.1mT 10kHz	°C	450	500	500
Resistivity (typical)	ρ	1V/cm 25°C	ohm-cm	10^5	10^5	2×10^4

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Applications Guide				Short and medium wave antennae, EMI suppression, High frequency inductors and transformers									
Parameter	Symbol	Standard Conditions of test	Unit	GL18	GL15	GL6	GL5	GL5B	GL4	GLGB	GL3B	GL8	GL1A
Initial Permeability (nominal)	μ_i	B<0.1mT 10kHz 25°C	-	1800 ±25%	1500 ±25%	1200 ±25%	850 ±25%	750 ±25%	370 ±25%	350 ±25%	300 ±25%	200 ±25%	120 ±25%
Saturation Flux Density (typical)	B_{sat}	H=796 A/m =10 Oe Static 25°C	mT	250	230*	260	210	320	310	350*	350	340	280
Remanent Flux Density (typical)	B_r	H→0(from near Saturation) 10kHz 25°C	mT	170	175	165	130	141	270	200	217	260	190
Coercivity (typical)	H_c	B→0(from near Saturation) 10kHz 25°C	A/m	28	30	53	50	59	60	65	172	200	300
Loss Factor (maximum)	$\frac{\tan \delta_{(pre)}}{\mu_i}$	B<0.1mT 25°C	100kHz	150	140	-	26	-	-	-	-	-	-
			250kHz	-	-	-	-	50	-	-	-	-	-
			400kHz	-	-	-	-	-	65	-	-	-	-
			500kHz	-	-	130	-	65	-	40	-	-	-
			1MHz	-	-	350	-	130	-	42	60	-	-
			2MHz	-	-	-	-	-	-	50	-	45	-
			3MHz	-	-	-	-	-	-	-	-	-	-
			5MHz	-	-	-	-	-	-	-	-	65	-
			10MHz	-	-	-	-	-	-	-	-	100	-
			15MHz	-	-	-	-	-	-	-	-	-	-
			20MHz	-	-	-	-	-	-	-	-	-	-
40MHz	-	-	-	-	-	-	-	-	-	-			
100MHz	-	-	-	-	-	-	-	-	-	-			
200MHz	-	-	-	-	-	-	-	-	-	-			
Temperature Factor	$\frac{\Delta \mu}{\mu_i^2 \Delta T}$	B<0.1mT 10kHz +25°C to +55°C	$10^{-6}/^\circ\text{C}$	-	-	3 to 6.5	-	1.5	-	-	12 to 30	20 to 50	-
Curie Temperature (minimum)	Θ_c	B<0.1mT 10kHz	°C	100	80	120	100	180	145	240	270	270	400
Resistivity (typical)	ρ	1V/cm 25°C	ohm-cm	10^7	5×10^8	-	10^6	3×10^4	10^8	10^5	10^5	10^5	10^7