F25 F28 F29 Special Grades

Material Type: Nickel-Zinc Ferrite

Properties: *Perminvar
*Very high Q at high frequency

Frequency range: 1MHz + depending on material grade

Typical Applications: Aerial rods and high frequency tuned circuits.

Available core shapes: On request.

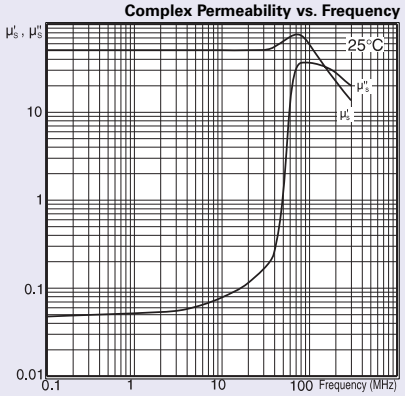
Note: Perminvar ferrites undergo irreversible changes of characteristics if subject to strong magnetic fields or mechanical shock.

Material Specifications

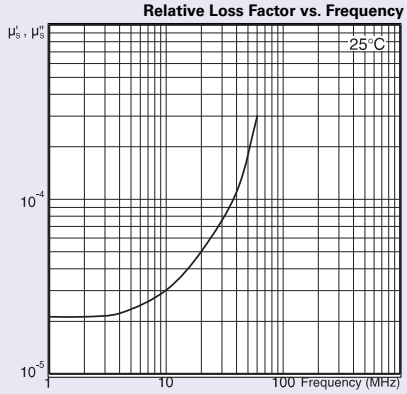
Parameter	Symbol	Standard Conditions of test		Unit	F25	F28	F29
Initial Permeability *(nominal)*		B<0.1mT 10kHz	25°C	-	**50** *±20%*	**30** *±20*	**12** *±20*
Loss Factor *(maximum)*	$\frac{\tan\delta_{(r+e)}}{\mu_i}$	B<0.10mT	1MHz	10^{-6}	**50**	-	-
			2MHz		**50**	-	-
			3MHz		**55**	-	-
			5MHz		**65**	-	-
			10MHz		**75**	**80**	**100**
			15MHz		**100**	-	-
			20MHz		**125**	-	-
			40MHz		**300**	-	-
			100MHz		-	**250**	**200**
			200MHz		-	-	**1000**
Curie Temperature *(minimum)*	Θ_C	B<0.10mT	10kHz	°C	**450**	**500**	**500**
Temperature Factor	$\frac{\Delta\mu}{\mu_i^2.\Delta T}$	+25°C to +55°C B<0.10mT	10kHz	°C	**15**	**10 to**	**3050**
Resistivity *(typical)*	ρ		1 V/cm 25°C	ohm-cm	10^5	10^5	10^5

F25

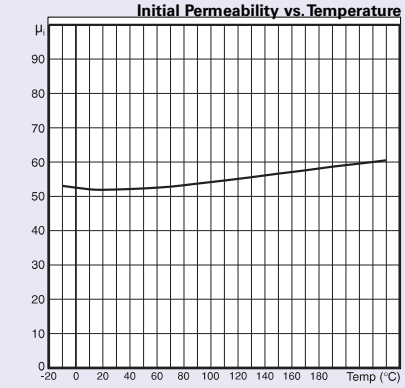
Complex Permeability vs. Frequency



Relative Loss Factor vs. Frequency

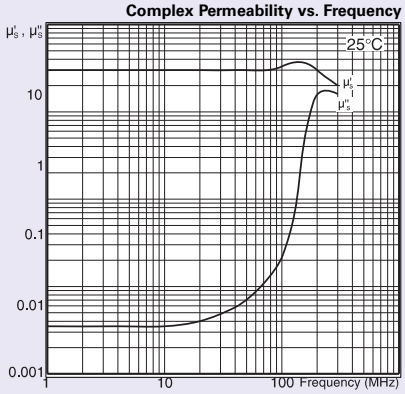


Initial Permeability vs. Temperature

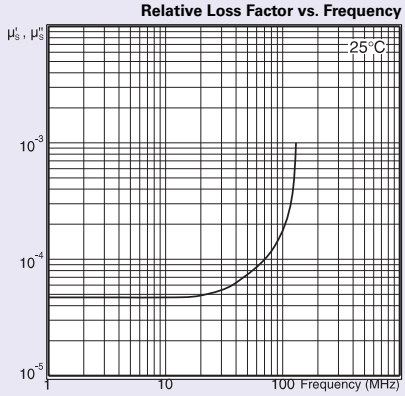


F28

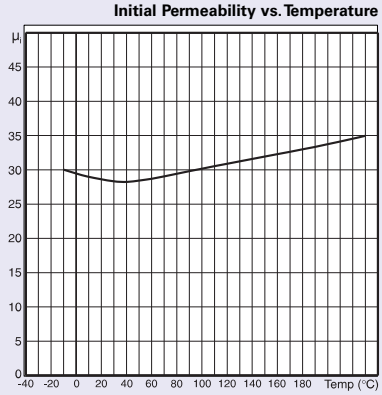
Complex Permeability vs. Frequency



Relative Loss Factor vs. Frequency

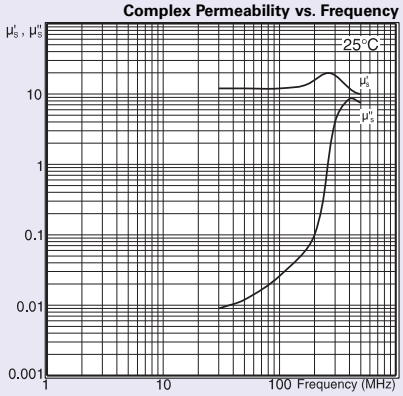


Initial Permeability vs. Temperature

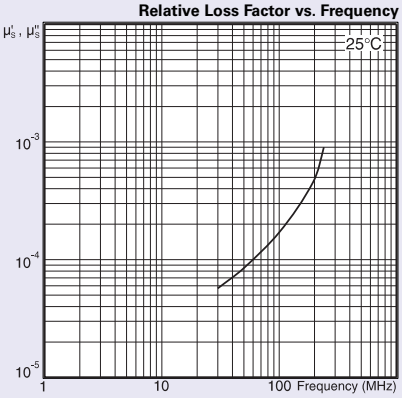


F29

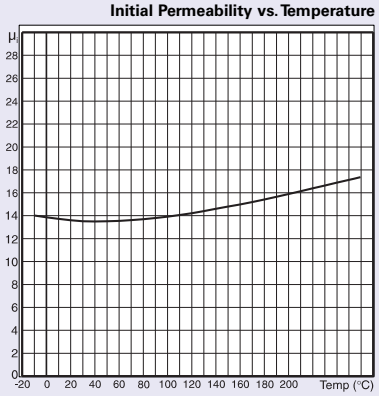
Complex Permeability vs. Frequency



Relative Loss Factor vs. Frequency



Initial Permeability vs. Temperature



Data is derived from measurements on a ring core of 14.5x3.8x12mm (OD x ID x HT)