

## *Ni-Zn Ferrite (for Line Filters)*

### ■Material Characteristics

Material Code		NZ001A	NZ021A	NZ112H	NZ112A	NZ131A	NZ273B	NZ241 A	NZ312B	NZ311A
Metallization is available ( ★ )		★	★	★		★		★		★
Initial Permeability	100KHz	1	7	60	65	160	150	480	490	650
	1MHz	1	7	58	65	160	150	480	500	650
	10MHz	1	7	58	65	160	160	300	260	270
Relative Loss Factor ( $\tan\delta/\mu$ )	100KHz (xE-6)		26000	335	200	150	120	15	15	20
	1MHz (xE-6)		3600	625	130	80	50	30	60	55
	10MHz (xE-6)		1300	1375	180	280	80	2700	3200	4500
Relative temperature coefficient ( $\alpha\mu$ )	-25-20deg C (xE-6)		35	15	0	50	15	15	0	20
	20-80deg C (xE-6)		35	8	0	35	10	7	-1	10
Saturated Magnetic Flux Density Bs (mT)			140	360	380	370	250	350	290	390
Residual Magnetic Flux Density Br (mT)			60	150	230	160	90	120	110	210
Curie Temperature (deg C)			≥300	≥300	≥300	240	170	150	90	160
Electrical Resistivity (Ohm·cm)		100M	100M	100M	100M	100M	100M	100M	100M	100M
使用周波数(MHz )		20 ~	20 ~ 250	0.5 ~ 15	0.5 ~ 15	0.3 ~ 6	0.3 ~ 6	0.05 ~ 1.5	0.05 ~ 1.5	0.05 ~ 1.0

## Ni-Zn Ferrite (for Power Inductors)

### Material Characteristics

Material Code		NZ262C	NZ262B	NZ311A	NZ420A	NZ411B	NZ511A
Metallization is available ( ★ )				★			
Initial Permeability	100KHz	400	500	650	950	1100	2000
	1MHz	400	500	650	980	1200	1500
	10MHz	250	220	270	300	250	240
Relative Loss Factor ( $\tan\delta/\mu$ )	100KHz (xE-6)	15	20	20	12	15	15
	1MHz (xE-6)	30	50	55	70	120	360
	10MHz (xE-6)	4000	5000	4500	4000	5300	9600
Relative temperature coefficient ( $\alpha\mu$ )	-25-20deg C (xE-6)	12	14	20	-	15	7
	20-80deg C (xE-6)	17	10	10	-	6	2
Saturated Magnetic Flux Density Bs (mT)		470	430	390	390	380	320
Residual Magnetic Flux Density Br (mT)		300	150	210	-	170	100
Curie Temperature (deg C)		300	220	160	180	120	80
Electrical Resistivity (Ohm·cm)		100M	100M	100M	100M	100M	100M
使用周波数 ( MHz )		0.05 ~ 2	0.05 ~ 1.5	0.05 ~ 1	0.05 ~ 1	トランス用 0.01 ~ 0.5	トランス用 0.01 ~ 0.5

## *Ni-Zn Ferrite (For RF-ID Antenna)*

### ■Material Characteristics

Material Code		NZ312B	NZ301B	NZ511A
Metallization is available ( ★ )				
Initial Permeability	100KHz	490	570	2000
	1MHz	500		1500
	10MHz	260		240
Relative Loss Factor ( $\tan\delta/\mu$ )	100KHz (xE-6)	15		15
	1MHz (xE-6)	60		360
	10MHz (xE-6)	3200		9600
Relative temperature coefficient ( $\alpha\mu$ )	-25-20deg C (xE-6)	0	0	7
	20-80deg C (xE-6)	-1	2	2
Saturated Magnetic Flux Density Bs (mT)		290	290	320
Residual Magnetic Flux Density Br (mT)		110	110	100
Curie Temperature (deg C)		90	125	80
Electrical Resistivity (Ohm·cm)		100M	100M	100M
使用周波数 8 MHz )		0.05 ~ 1.5	0.05 ~ 1.5	0.01 ~ 0.5