



## Mn-Zn Ferrite Cross-Reference List (功率)

国家	公司名称	材料牌号															
mainland China	东磁 (DMEGC)	DMR30	DMR40	DMR44	DMR47	DMR24	DMR28	DMR90	DMR95	DMR96	DMR55/	DMR50/	DMR51	DMR52	DMR73	DMR70	DMR71
	TDG	TP3	TP4	TP4A	TP4D	TP4E/T PB15		TP4E/TP B15	TP4W/TP W33		TP4S	TP5			TD5A	TH2	TD5B
	FENGHUA	PG252	PG232	PG242				PG182A	PG312		PG192				HB502		
Japan	TDK	PC30/PC 32	PC40	PC44	PC47			PC90	PC95			PC50			DN45		
	NICERA	NC-1M	NC-2H	2H-M4/ 2H-M5		BM30/B M40		BM27/BM 29	3H		2M	5M			4B	2B	3B
	FDK (FUJ1)	6H10	6H10/6H20	6H40/6H4 1					6H60			7H10					
	HITACHI		ML24D	ML25D		MB28D		MB19D	ML30D/ ML32D			ML14D			MQ40D	MQ25D	
	NEC-TOKIN		BH2	BH1		BH3	BH7				BH5	B40					
	JFE	MB1	MB3	MB4		MB1H			MBT1				MC2				
	TOMITA	2E6	2G8	2E8		2N6						2H8			2H5		2N3
Europe	FERROXCUBE		3C30&3C34&3C 90	3C94		3C92		3C96	3C95	3C97	3F3	3F35			3E28	3B7	3B46, 3S5
	EPCOS	N41	N67, N72	N87, N97		N92			N95			N49			T57	N48	N45
	KOLEKTORMAGMA (ISKRA)	25G	45G	65G								75G, 76G				16G, 26G	27G
	VOGT	Fi324	Fi328	Fi325								Fi327					
	KASCHKE	K2006	K2008/ K2500														
AVX (THONSON)	B1	F1			B3/B5/ B7						F2	F4				A9	A8
Korea	ISU	PM5	PM7	PM11		BM14			PM12		FM4	FM5					BM30
	SAMWHA	PL-5	PL-7	PL-13L	PL-15	PL-HB			PL-13		PL-F1				SM43T	SM-23T	
	YOUNGHWHA		YP-2	YP-3													
USA	FAIR-RITE		78									79					
	MAGNETICS		P						T		R						
	STEWART														36		
MMG-NEOSID	F5A/F5C	FB2/FB3/F45			F44						F45/F47			F65	F9Q		
Taiwan	ACME	P2	P4	P41		P42		P44	P46		P5	P51			N2	N4	N42
	ENCORE (大冶)		NP1	NP2											N5X		
	Huoh Yow (华佑)	KL24	KL40	KL44/KL4 5		KL20B			KL33W		KL15F				KM40Q	KM25	KM30T
	TAK (铁研)		TP40														
India	COSMO	CF196	CF138	CF139		CF122											



## Mn-Zn H- $\mu$ Ferrite Cross-Reference List (高导)

国家	公司名称	材料牌号							
mainland China	东磁 (DMEGC)	R4K/R5K	R6K/R7K		R10K		R12K	R15K	R15KTF
	TDG	TS5/TL5	TS7/TL7	TS10/TL10	TS10/TL10		TS13/TL13	TS15	TL15
	FENGHUA	HS502	HS702	HS103B	HS103A/HG10		HS123	HG153	
Japan	TDK	HS52	HS72	HS10	H5C2	/	/	H5C3	/
	NICERA	NC-5Y	NC-7	NC-10H	10TB	/	12H	15H	15H
	FDK (FUJI)	2H04, 2H06	2H07	2H10	/	/	/	2H15	2H15
	HITACHI	MQ40D/MQ53D	MP70D	MP10T	MD10T	MQ10T	/	/	MP15T
	NEC-TOKIN	5H	7H	10H	/	/	12H	/	15H
	JFE	MA055/MAT05	MA070/MA085	MA100	/	/	MA120	MA150	MA150
	TOMITA	2G4/2G4B	2G1	2E2B	2H2A	/	2H2B	2H1	2H1
Europe	FERROXCUBE	3E25/3E27	3E27	3E5	3E55	/	3E6	3E7	3E7
	EPCOS	N30/T65	T36/T37/T44	T38	T38	/	T42	T46	T46
	KOLEKTOR	19G, 22G, 23G	42G, 23G	12G	12Gi	/	32G	/	52G
	VOGT	Fi340, Fi360		Fi410	/	/	Fi412	/	Fi415
	KASCHKE	k5500/k6000	k8000	k10000	/	/	k12000	/	k15000
	NEOSID	F-860	F-938	/	/	/	/	/	F-942
	AVX (THONSON)	A5/A6	A3/A4	A2	/	/	A1+	A0+	/
Korea	ISU	HM2A	HM3/HM3A	HM5A	/	/	/	/	/
	SAMWHA	SM-50/SM-60	SM-70S	SM-100	/	/	/	SM-150	/
	YOUNGHAW	YH-5	YH-8	YH-10	/	/	/	/	/
USA	FAIR-RITE	75	/	76	/	/	/	/	/
	MAGNETICS	J	/	/	W	/	/	/	H
	STEWART	35/56	39/42	40	/	/	/	/	/
	MMG-NEOSID	F82/FT6/F10/	FT7	F39	FTA	/	/	FTF	FTF
	FERRONICS	B	/	T	/	/	/	V	V
Taiwan	ACME	A05	A07	A10	A101	A102	A121	A15	A151
	ENCORE (大冶)	N05	N07	N10	/	/	/	/	/
	Huoh Yow (华佑)	KM50	KM70	KM100	/	/	/	/	/
	TAK (铁研)	T5	T7	T10	/	/	/	/	/
India	COSMO	CF190/CF191/CF195	CF197	CF199	/	/	/	/	/





## Nickel-Zinc Ferrite Cross-Reference List (镍锌)

国家	公司名称	材料牌号											
mainland China	东磁 (DMEGC)	DN5H	DN10H	DN30B; DN30L	DN35H; DN40B; DN40L	DN50B; DN50L	DN65H	DN80H; DN75L; DN80L	DN85H	DN120L	DN150H	DN160L	DN200L
	TDG		TN12B	TN25G	TN40H/40L	TN45B	TN65H/65B	TN80L	TN90H	TN120L	TN150P	TN150P	TN200B
Japan	TDK	M9	Q5B	L14H; L11H	L2H; L20H	L13H		L18H; L7H		L17H	L6		/
	HITACHI	/	ND12S	NL30S	NL40S	NL45S		NL80S; NB80S		NL12D	NR15D	DL16D	NP20D
	FDK	G35; K26	K14	L19H	K34; L51	L52H	K32; L52	L58; L47H			L62		L68
	TOMITA	6D2	5H2	/	4D4		3A5	3A4		/	3A8		3A7
Korea	ISU	/		YM01	YM02	/		NM8		NM13	/		/
	SAMWHA	/	SM-2C	/	NL-81	/	SN-065	SN-08L	T-314	SN-12L		SN-16L	SN-20
	HUOH YOW	/	/	T13S; T13SH	T12S; T12SH; T8SH	TL70H		TL80		TL12D	H6L		/
Taiwan	ACME	L4	L5	B30	B45	B60		K081		K12		K15	K20
	HUOH YOUW	H9	H8C	TB48	T12SH; TB46	T8SH	H5	TL70	TL10D		H6A; H6L		T25S
	FYE	Y8B	Y8C		F3B; C4	F4D	C5A		C5C		C6		
	TAK	M9D1	M61	DL6	DL5; MGB1	DL4			L43	L6A	L8A		
Europe	EPCOS							K10			K7		M13
	FERROXCUBE	4D2	4C65	4B1; 4B3	/		4S2	4A11		4A15; 8C11	/		4S60
USA	Steward		25					28	26	24		27; 38	
	Fair-Rite	67	61	52	51	44	33	43				31	







特性 Characteristic	符号 Symbol	单位 Unit	GH5	GH6	GH7	GH7A	GH10	GH10A	GH12	GH15
初始磁导率 Initial Permeability	$\mu_i$		5500 $\pm 25\%$	6000 $\pm 25\%$	7000 $\pm 25\%$	7500 $\pm 25\%$	10000 $\pm 25\%$	10000 $\pm 25\%$	12000 $\pm 25\%$	15000 $\pm 25\%$
相对损耗因数 Relative Loss Factor	$\frac{\tan \delta}{\mu_i}$	$* 10^{-6}$	$\leq 15$ (100kHz)	$\leq 15$ (100kHz)	$\leq 7$ (10kHz)	$\leq 7$ (10kHz)	$\leq 7$ (10kHz)	$\leq 7$ (10kHz)	$\leq 7$ (10kHz)	$\leq 7$ (10kHz)
饱和磁通密度 Saturation Flux Density	$B_s$	mT	410	410	400	400	400	400	390	380
			800A/m	800A/m	800A/m	800A/m	1194A/m	1194A/m	1194A/m	1194A/m
剩磁 Remanence	$B_r$	mT	65	65	85	85	90	90	90	90
矫顽力 Coercivity	$H_c$	A/m	6	6	6	6	6	6	4.4	4.4
居里温度 Curie Temperature	$T_c$	$^{\circ}\text{C}$	>140	>140	>130	>130	>120	>120	>115	>110
电阻率 Resistivity	$\rho$	$\Omega \cdot \text{m}$	0.3	0.3	0.3	0.3	0.15	0.15	0.15	0.15
密度 Density	$d$	$\text{Kg}/\text{m}^3 * 10^3$	4.9	4.9	4.9	4.9	4.9	4.9	4.95	4.95
相对温度系数 Relative Temperature Coefficient	$\alpha_{\mu r}$	$* 10^{-6} \cdot 1/\text{K}$	-0.5~2.0 20~60 $^{\circ}\text{C}$	-0.5~1.5 20~60 $^{\circ}\text{C}$	0~1.5 -30~20 $^{\circ}\text{C}$ 0~2 20~55 $^{\circ}\text{C}$	0~1.5 -30~20 $^{\circ}\text{C}$ 0~2 20~55 $^{\circ}\text{C}$	-0.5~1.5 -30~20 $^{\circ}\text{C}$ -0.5~1.5 20~70 $^{\circ}\text{C}$	-0.5~1.5 -30~20 $^{\circ}\text{C}$ -0.5~1.5 20~70 $^{\circ}\text{C}$	-0.5~2.0 -30~20 $^{\circ}\text{C}$ -0.5~1.5 20~70 $^{\circ}\text{C}$	-0.5~1.5 -30~20 $^{\circ}\text{C}$ -0.5~1.5 20~70 $^{\circ}\text{C}$
减落因素 Disaccommodation Factor	$D_f$	$* 10^{-6}$	$\leq 3$	$\leq 3$	$\leq 3$	$\leq 3$	$\leq 2$	$\leq 2$	$\leq 2$	$\leq 2$

以上数值均由 T25 磁环测得，不同产品的实际数值会在此基础上有所调整。

The values are obtained by T25 test cores. The data may have some adjustments according to specific products.

特性 Characteristic	符号 Symbol	单位 Unit		GS3	GP4	GP4A	GP4B	GP4C	GP44	GP47	GP95	GP5
初始磁导率 Initial Permeability	$\mu_i$			3000 $\pm 25\%$	2300 $\pm 25\%$	2800 $\pm 25\%$	1800 $\pm 25\%$	1500 $\pm 25\%$	2400 $\pm 25\%$	2500 $\pm 25\%$	3300 $\pm 25\%$	2900 $\pm 25\%$
饱和磁通密度 Saturation Flux Density	$B_s$	mT	25 $^{\circ}\text{C}$	500	500	500	510	510	500	520	510	500
			100 $^{\circ}\text{C}$	390	380	380	410	410	390	420	400	380
剩磁 Remanence	$B_r$	mT		120	130	130	110	110	110	110	95	120
矫顽力 Coercivity	$H_c$	A/m		16	16	16	14	17	13	13	12	16
功率损耗 Power Loss (F=100KHz, B=200mT)	$P_c$	$\text{Kw}/\text{m}^3$	25 $^{\circ}\text{C}$	500	600	580	660	1100	600	600	380	480
			80 $^{\circ}\text{C}$	600	400	430	410	720	320	310	300	480
			100 $^{\circ}\text{C}$	650	410	480	440	550	300	280	320	500
居里温度 Curie Temperature	$T_c$	$^{\circ}\text{C}$		>210	>215	>215	>225	>265	>215	>215	>215	>215
电阻率 Resistivity	$\rho$	$\Omega \cdot \text{m}$		8	6.5	7	5	5	6.5	7	6	6
密度 Density	$d$	$\text{Kg}/\text{m}^3 * 10^3$		4.85	4.8	4.8	4.8	4.8	4.8	4.9	4.9	4.8

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