

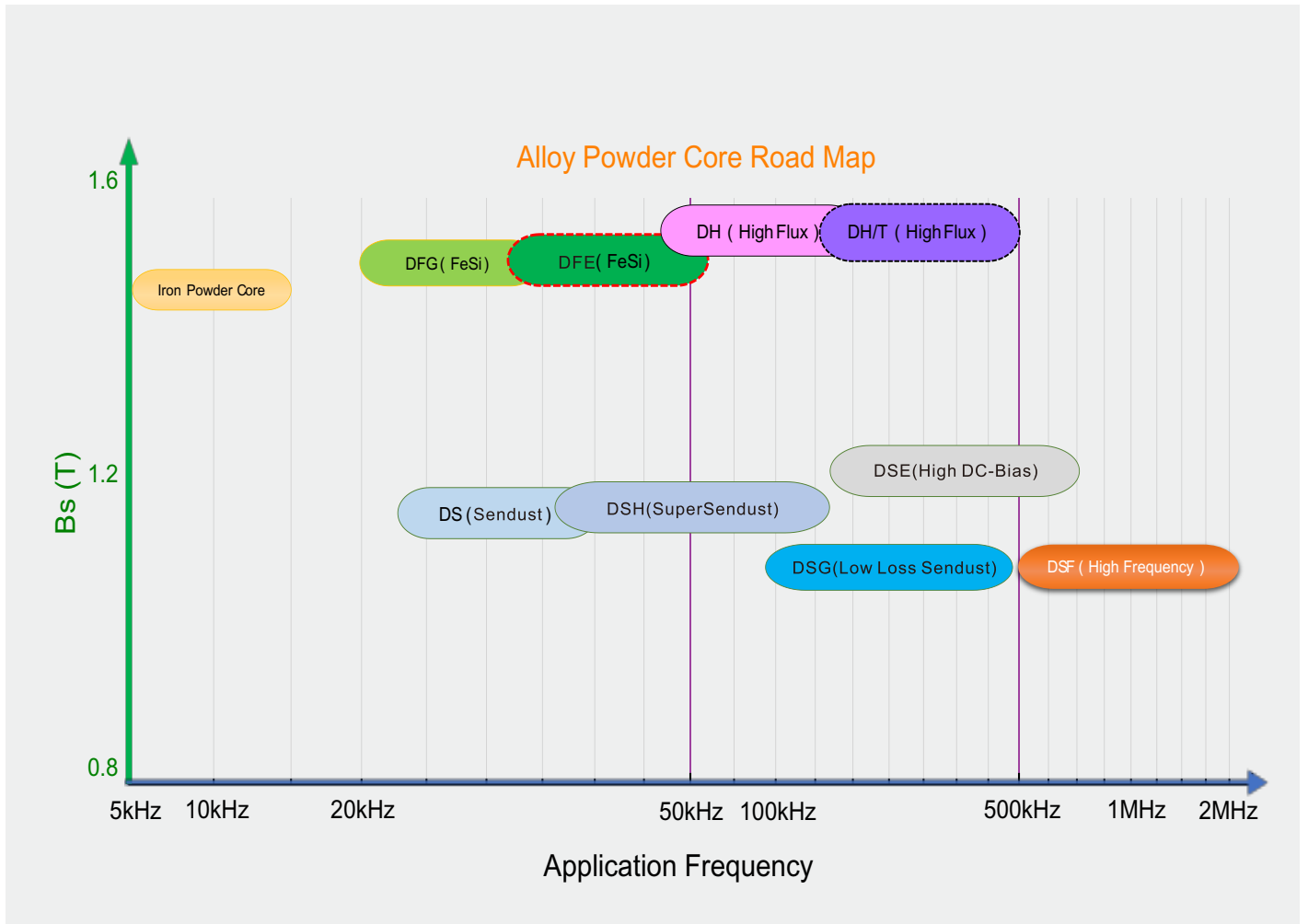


MnZn EMC Material

Cross-Reference List

Company	Material												
DMEGC	R5KZ	R6K R7K	R10KC	R10KZ	R12KZ	R15K	DMR73	DMR70	DMR71	DMR31B	DMR31	DMR32	DMR33
TDK	HS 52	HS 72	HS 10			H5C3	DN 45						
HITACHI	MQ40D MQ53D	MP70D		MP10T			MQ40D	MQ25D					
NEC-TOKIN	5H	7H		10H	12H								
FERROXCUBE	3E25 3E27	3E27		3E10 3E5	3E6 3E12	3E7	3E28	3B7 3H3	3B46 3S5	3N1T	3N1		
EPCOS	N30 T65	T36 T37 T44		T38	T42 T66	T46	T57	N48	N45				
FAIR-RITE	75			76							31	73	
ACME	A05	A07 A071	A104	A102 A10	A121	A15	N2	N4	N42		N5		



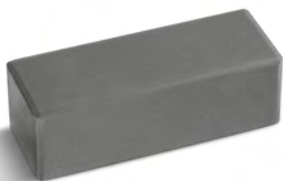


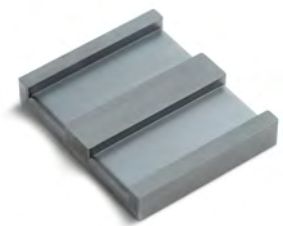
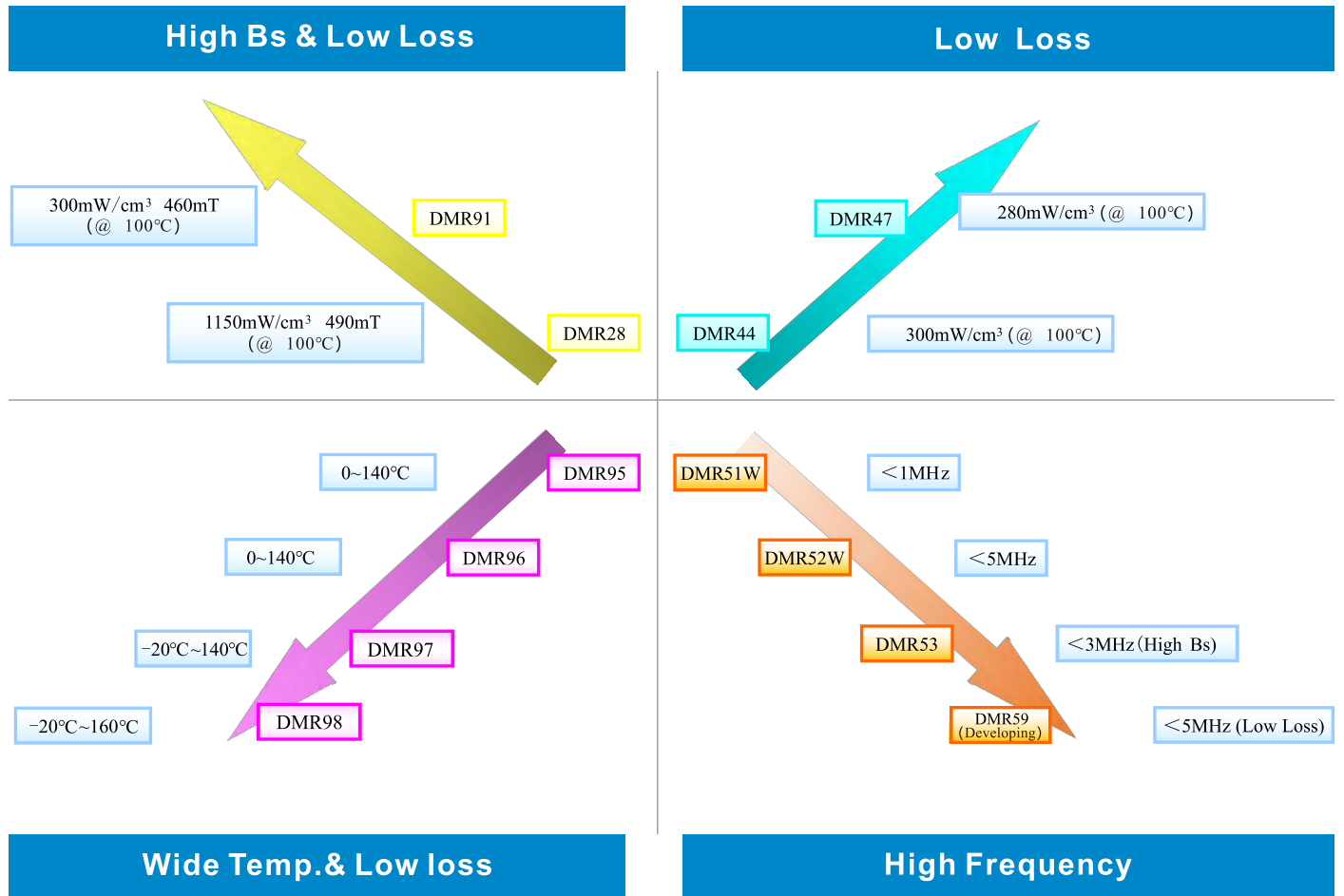


Alloy Powder Core

Cross-Reference List

Company	Material										
DMEGC	DFG (026-090)	DS (026-125)	DSH (026-125)	DSG (019-090)	DSF (060-090)	DSE (060-090)	DFE (060-090)	DH (026-200)	DNH (026-125)	DH/T (026-090)	DM (026-300)
POCO	NPF (026-090)	NPS (026-125)	NPH (026-125)	NPA (026-060)	NPX (026-060)	NPC (060-090)	NPV (060-090)	NPN (026-125)		NPN-LH (026-125)	
MAG-INC	78 (026-060)	77 (026-125)	79 (026-125)	76 (026-125)				58 (014-160)		59 (026-60)	55 (014-550)
CSC	CK (026-090)	CS (014-160)	HP (026-060)					CH (026-160)	HS (019-090)	CH-GT (026-60)	CM (026-200)
KDM	KSF (026-090)	KS (026-125)	KS-HF (019-90)	KAM-HF (026-60)		KPH-HP (060-090)		KH (026-125)	KNF-H (026-125)	KH-H (026-60)	KM (026-125)







MnZn Power Ferrite

Cross-Reference List

Company	Material												
DMEGC	DMR40	DMR44	DMR47	DMR24	DMR28	DMR91	DMR95	DMR96 DMR96A	DMR55	DMR50 DMR50B	DMR51W	DMR52W	DMR53
TDK	PC40	PC44	PC47			PC90 PC80	PC95			PC50	PC200		
HITACHI	ML24D	ML25D		MB28D		MB19D MB20D	ML30D ML32D	ML27D		ML14D	ML91S ML95S		
NEC-TOKIN	BH2	BH1				BH3			BH5	B40			
FERROXCUBE	3C30 3C34 3C90	3C94 3C96	3C98	3C92	3C92A	3C92	3C95 3C91	3C97 3C95A 3C95F	3F3	3F35 3F36	3F46	3F5	
EPCOS(TDK)	N72	N87 N97	PC47	N92			N95			N49			
FAIR-RITE	78	98/77					95		97	79			
ACME	P4	P41	P48	P42	P491	P49	P47	P451	P5	P51	P61		P63





Nanocrystalline core

Cross-Reference List

Company	Material								
DMEGC	DNL2K	DNL4K	DNL5K	DNL6K	DNG1.5W-S	DNG3W-S	DNG5W-S	DNG8W-S	DNG8W-S3
VAC VITROPERM	VP220	VP250F		VP270F	VP712F	VP500/800			VP550HF
VAC VITROVAC		6030 D30							
Hitachi FINEMET			FT-8K50D			FT-3KL		FT-3KM	FT-3K50T



Company	DMEGC	HITACHI	TDK	ACME	EPCOS	FERROXCUBE
Material	DN5H		T5F	H2		4D2
	DN10H	ND11S	T3F	H3		4C65
	DN15P			H3B		4F1
	DN20L		L9H	H5R		
	DN30B	NB25S	L14H	B30		4B1
	DN33L	NL30S	L14H			4B3
	DN35H	NN35S		D1C		
	DN45H	NH45S		B45/A40		
	DN40L	NL40S	L20H	B40		
	DN45L	NL45S	L2H			
	DN50T		GT1			
	DN50B	NB50S	L13H	D25/A50		
	DN65H	NH65S	L8H	D27		
	DN80L	NB80S/NL80S	L7H	K801	K10	4A11
	DN85H			D28/M80	K8	4S2
	DN100H	NH90S	L6H	D30	K8	4A15
	DN100T			K10		
	DN120L	NB12D/NL12D	L17H	K12/D35	K6	8C11/4A15
	DN150H	NP15D	L8F	K15	K7	
	DN160L	NL16D	L16P			
DN200L	NP20D		K20/D40	M13	4S60	





DMR97

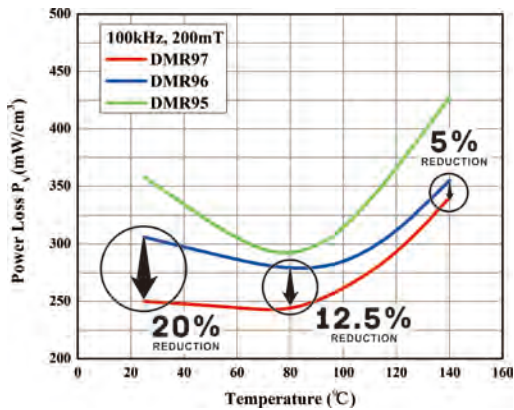
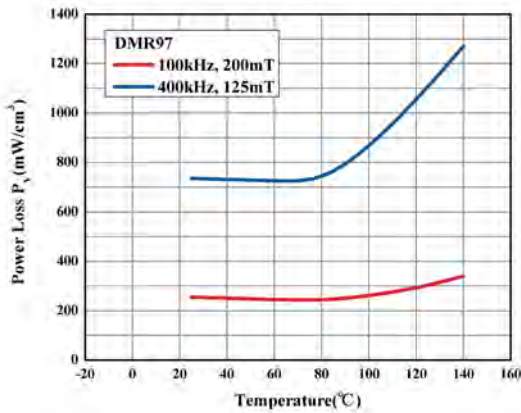
New MnZn Power Ferrite Material

Feature

- Lower power loss at wide temperature
- Power loss at 25°C to 80°C is 255mW/cm³ typical value
- Saturation magnetic flux density(Bs) is 540mT at 25°C and 430 mT at 100°C
- The application frequency is from 100kHz to 400kHz

Application

- Server Power
- PC Laptop Adapter
- Switching Power Supply



DMR97 Material Characteristics

CHARACTERISTICS	CONDITIONS		VALUE		
Initial Permeability μ_i	f=10kHz, B<0.25mT	25°C	3300±25%		
Saturation Magnetic Flux Density Bs (mT)	1194A/m	25°C	540		
		100°C	430		
Residual Magnetic Flux Density Br (mT)	50Hz	25°C	65		
		100°C	55		
Coercive Force Hc(A/m)	100kHz, 200mT	25°C	15		
		100°C	10		
Power Loss P_v (mW/cm ³)	100kHz, 200mT	25°C	255		
		60°C	245		
		80°C	240		
		100°C	260		
		120°C	290		
		140°C	340		
	400kHz, 125mT	25°C	735		
		60°C	725		
		80°C	720		
		100°C	860		
		120°C	1050		
		140°C	1270		
		Curie Temperature Tc (°C)	f=10kHz, B<0.25mT		>230
		Density d (g/cm ³)		25°C	>4.8

The typical data is from the standard toroid core $\phi 25 \times 15 \times 8$ tested value. The property of other dimension and shape cores will be varied from core to core.





DMR98

New MnZn Power Ferrite Material

Feature

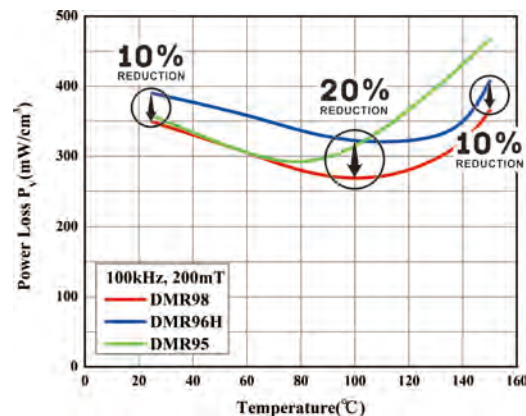
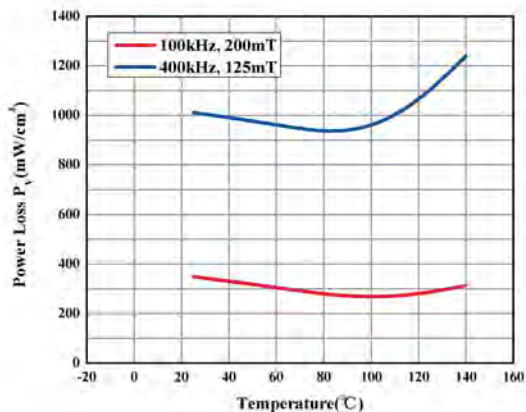
- Lower power loss at high temperature
- Power loss at 100°C to 140°C is 320mW/cm³, Power loss at 100°C is 270mW/cm³, and Power loss at 120°C is 280mW/cm³
- Saturation magnetic flux density(Bs) is 540mT at 25°C and 425mT at 100°C
- The application frequency is from 100kHz to 400kHz

DMR98 Material Characteristics

Application

- OBC for vehicles
- DC/DC converter for vehicles

CHARACTERISTICS	CONDITIONS		VALUE	
Initial Permeability μ_i	f=10kHz, B<0.25mT	25°C	3000±25%	
Saturation Magnetic Flux Density Bs (mT)	1194A/m 50Hz	25°C	540	
		100°C	425	
Power Loss P_V (mW/cm ³)	100kHz, 200mT	25°C	350	
		60°C	310	
		80°C	280	
		100°C	270	
		120°C	280	
		140°C	320	
		150°C	370	
		400kHz, 125mT	25°C	1050
			60°C	980
			80°C	950
			100°C	1000
			120°C	1100
			140°C	1260
			Curie Temperature Tc (°C)	f=10kHz, B<0.25mT
Density d (g/cm ³)		25°C	>4.8	



The typical data is from the standard toroid core $\phi 25 \times 15 \times 8$ tested value. The property of other dimension and shape cores will be varied from core to core.

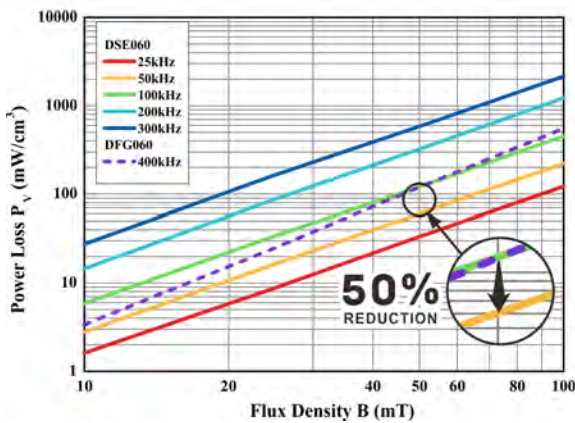
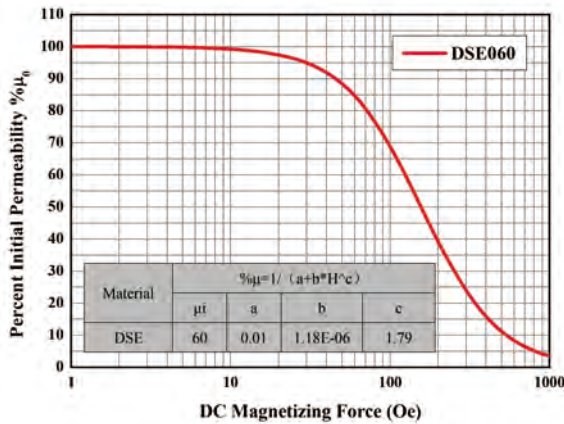


Feature

- High DC-Bias characteristic
- Lower power loss
- High efficiency, High capacity for power change

Application

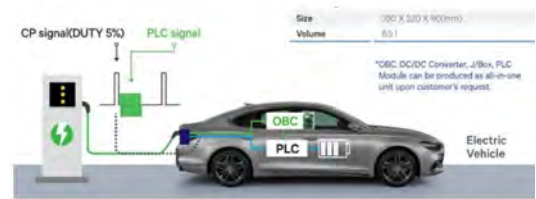
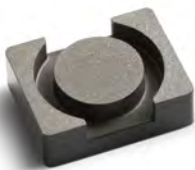
- Resonant inductor
- PFC inductor



DSE060 Characteristics

CHARACTERISTICS	CONDITIONS		VALUE
Initial Permeability μ_i	200kHz, 0.05V	25°C	60
Saturation Magnetic Flux Density B_s (mT)	50Hz, >50000A/m	25°C	1100
DC-Bias $\mu\%$ @100 Oe	200kHz, 0.05V	25°C	70
Power Loss P_v (mW/cm ³)	50kHz, 100mT	25°C	160
	100kHz, 100mT	25°C	400
Curie Temperature T_c (°C)	10kHz, B<0.25mT		>460
Operating Temperature Range T (°C)			-55~200

The typical data is from the standard toroid core $\phi 26.9 \times 14.7 \times 11.2$ tested value. The property of other dimension and shape cores will be varied from core to core.

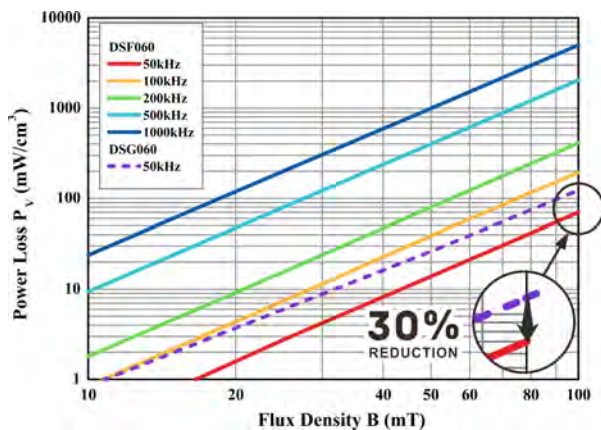
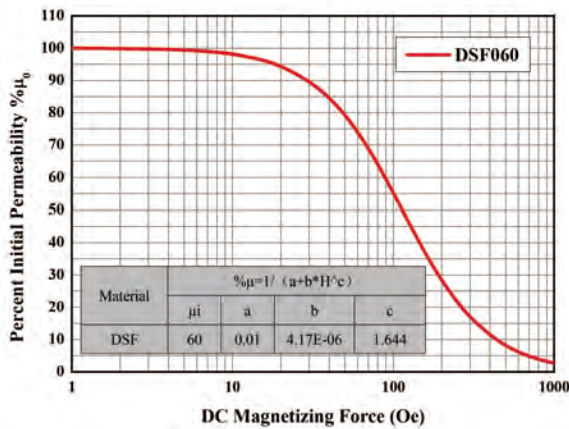


Feature

- Super high frequency application, especially in >500kHz
- Lowest core-loss in all powder cores
- High efficiency, High capacity for power change

Application

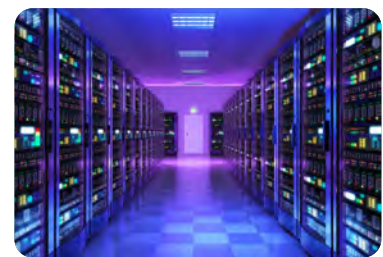
- High-quality power converter for IDC
- VRM/POL inductor for GPU/CPU



DSF060 Characteristics

CHARACTERISTICS	CONDITIONS		VALUE
Initial Permeability μ_i	200kHz, 0.05V	25°C	60
Saturation Magnetic Flux Density B_s (mT)	50Hz, >50000A/m	25°C	1100
DC-Bias $\mu\% @ 100$ Oe	200kHz, 0.05V	25°C	55
Power Loss P_v (mW/cm ³)	50kHz, 100mT	25°C	60
	100kHz, 100mT	25°C	90
	500kHz, 50mT	25°C	360
	1MHz, 20mT	25°C	130
Curie Temperature T_c (°C)	10kHz, B<0.25mT		>460
Operating Temperature Range T (°C)			-55~200

The typical data is from the standard toroid core $\phi 12.7 \times 7.62 \times 4.75$ tested value. The property of other dimension and shape cores will be varied from core to core.

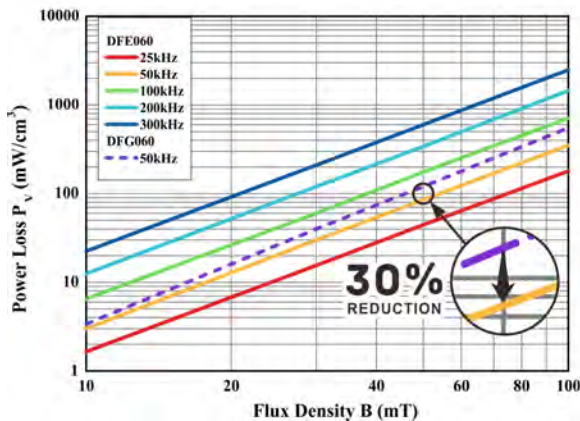
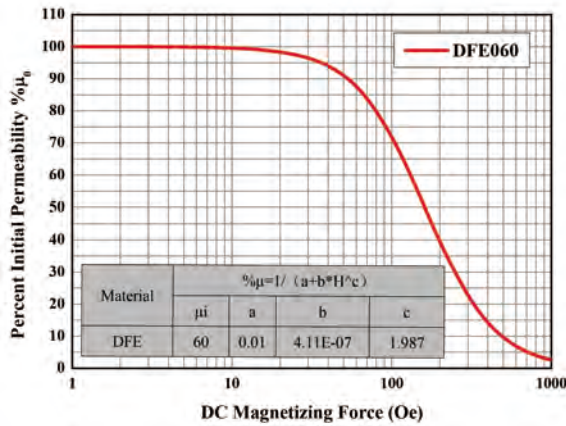


Feature

- High DC-Bias characteristic as FeSi powder core, but power loss 40% lower than FeSi
- High efficiency、High capacity for power change

Application

- Power converter
- DC-DC converter



DFE060 Characteristics

CHARACTERISTICS	CONDITIONS		VALUE
Initial Permeability μ_i	200kHz, 0.05V	25°C	60
Saturation Magnetic Flux Density B_s (mT)	50Hz, >50000A/m	25°C	1300
DC-Bias $\mu\%$ @100 Oe	200kHz, 0.05V	25°C	74
Power Loss P_v (mW/cm ³)	50kHz, 100mT	25°C	300
	100kHz, 100mT	25°C	600
Curie Temperature T_c (°C)	10kHz, B<0.25mT		>460
Operating Temperature Range T (°C)			-55~200

The typical data is from the standard toroid core $\phi 26.9 \times 14.7 \times 11.2$ tested value. The property of other dimension and shape cores will be varied from core to core.

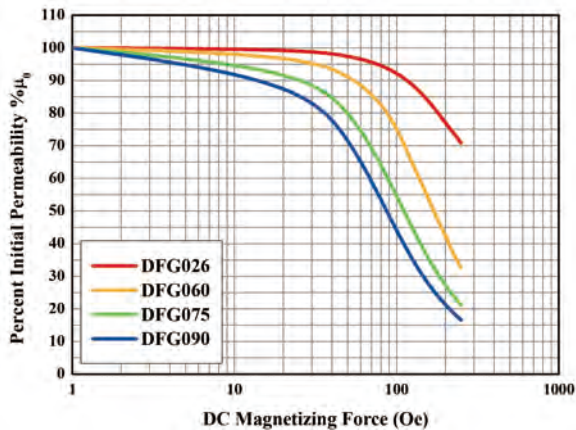


Feature

- Bs is up to 1.5T
- Excellent DC Bias
- Power loss is lower than Iron Powder Cores
- Excellent Temperature Stability

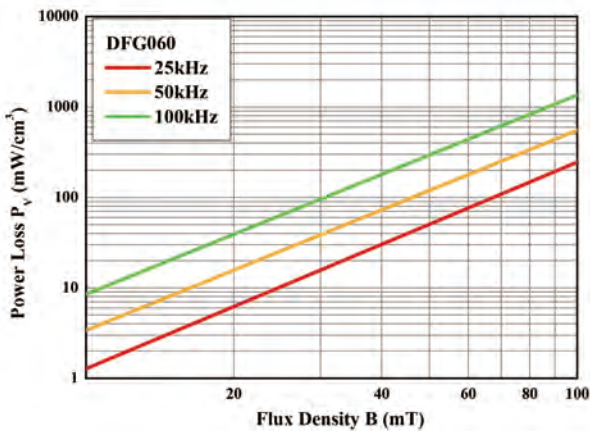
Application

- PFC Inductor
- On-line Noise Filter
- Pv or Wind Inverter



DFG060 Characteristics

CHARACTERISTICS	CONDITIONS		VALUE
Initial Permeability μ_i	200kHz, 0.05V	25°C	60
Saturation Magnetic Flux Density B_s (mT)	50Hz, >50000A/m	25°C	1500
DC-Bias $\mu\% @ 100$ Oe	200kHz, 0.05V	25°C	76
Power Loss P_v (mW/cm ³)	50kHz, 100mT	25°C	650
	100kHz, 100mT	25°C	1600
Curie Temperature T_c (°C)	10kHz, $B < 0.25$ mT		>650
Operating Temperature Range T (°C)			-55~200




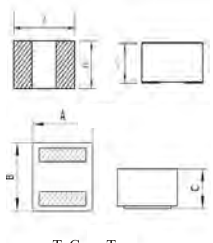
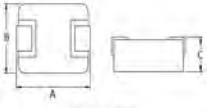
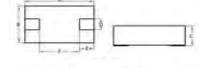
The typical data is from the standard toroid core $\phi 26.9 \times 14.7 \times 11.2$ tested value. The property of other dimension and shape cores will be varied from core to core.




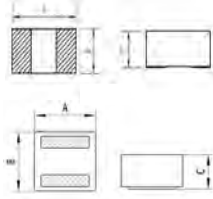
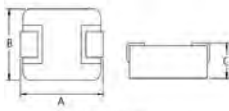


Molding Inductor

(Consumer Class)

Product Diagram	Consumer Part Number	Dimensions	Inductance Range	I _{rms}	I _{sat}	DCR Max
		(L X W X H) mm	(μH)	(A)	(A)	(mΩ)
 Coupling Type	DCHC1080A-C	11.0x 10 x 8.2	10.0~22.0	3.1~4.8	7.5 ~ 11.2	40.45~84.07
 T-Core Type	DCTC201210S-E	2.0 x 1.2x 1.0	0.11~2.2	1.6~6.4	2.1~8.5	10.0~156.0
	DCTC201610S-E	2.0 x 1.6 x 1.0	0.1~3.3	1.2~6.5	1.5~9.0	9.0~250.0
	DCTC252010S-E	2.5 x 2.0 x 1.0	0.1~4.7	1.3~6.5	1.8~8.5	12.0~262.0
	DCTC252012S-E	2.5 x 2.0 x 1.2	0.1~4.7	1.5~7.0	2.1 ~ 11.0	11.0~200.0
	DCTC322512S-E	3.2 x 2.5 x 1.2	0.15~6.8	1.3~6.8	2.0~11.6	12.0~220.0
	DCTC0420A-E	4.1x 4.1 x 2.0	0.08~4.7	5.5~30.0	4.0~30.0	1.6~47.0
	DCTC0431A-E	4.1x 4.1 x 3.1	1.0~10.0	2.0~10.5	2.7~11.0	6.2~110.0
 Molded Type	DCHC0430A-E	4.1 x 4.1 x 3.0	0.22~0.75	10.0~14.4	8.5~ 14	4.4~10.4
	DCHC322512A-C	3.2 x 2.5 x 1.2	0.47~4.7	1.55 ~ 5.2	2.05~7.0	22.0~ 195.0
	DCHC0754A-C	7.5 x 7.2 x 5.4	1.0~100.0	1.5~15.0	2.4 ~ 20.0	6.0~385.0
	DCHC0854A-C	8.1 x 8.0x 5.4	1.0~47.0	2.6~14.0	2.6~15.0	4.8~137
	DCHC1054A-C	10.85 x 10 x 5.4	1.5~10.0	7.5~28.0	8.0 ~ 28.0	4.3~27.0
	DCYC0420A-T	4.4x 4.2 x 2.0	0.24~22.0	1.2~13.0	1.65~ 19.0	6.40~408.0
	DCYC0530A-T	5.15 x 5.10 x 3.0	0.20 ~ 22.0	1.9 ~ 22.2	1.9 ~ 21.0	2.31 ~ 270.0
	DCYC0730A-T	7.1 x 6.6 x 3.0	0.15 ~ 33.0	2.0 ~ 26.0	2.6~ 52.0	2.5 ~ 242.0
	DCYC1030A-T	11.1 x 10.2 X 3.0	0.12 ~ 22.0	3.0 ~ 30.0	5.0~ 75.0	0.61 ~ 99.0
	DCYC1040A-T	11.1 x 10.0 X 4.0	0.15 ~ 68.0	2.5~ 45.0	3.0~75.0	0.65 ~ 195.0
	DCYC1050A-T	11.1 x 10.0 X 5.0	0.47~6.8	7.5~30.0	9.5~ 40.0	1.14~24
	DCYC1350A-T	13.3 x 12.2 x 5.0	0.10 ~ 47.0	3.0~ 55.0	5.0 ~118.0	0.59 ~ 130.0
	DCYC1365A-T	13.3 x 12.2 x 6.5	0.22 ~ 47.0	5.5~53.0	7.0~112.0	0.6~90.0
	DCYC1770A-T	17.2 x 16.85 X 7.0	1.5 ~ 68.0	5.2~ 40.0	6.5 ~ 40.0	2.15 ~ 85.0
	DCYC0530A-C	5.4x5.2x3.0	0.20~22.0	1.9~20.2	1.7 ~ 20.0	2.0~250.0
	DCYC0730A-C	7.0x6.6x3.0	0.15~33.0	1.8 ~ 27.0	2.3 ~ 30.0	1.3~242.0
	DCYC1040A-C	10.8x10x4.0	0.20~68.0	2.3 ~ 45.0	3.0~ 60.0	0.72~210.0
	DCYC1050A-C	10.8x10.0x5.0	0.68~68.0	2.8~ 29.2	4.0 ~ 30.0	1.93~211.0
	DCYC1350A-C	13.45x12.6x5.0	0.10~33.0	4.7 ~ 70.0	5.2 ~ 80.0	0.59~58.0
	DCYC1365A-C	13.45x12.6x6.5	0.22~33.0	5.0~ 52.0	7.5 ~ 100.0	0.60~45.0
DCYC1770A-C	17.15x17.15x7.0	1.0~68.0	5.5 ~ 42.0	6.0~ 50.0	1.46~60.0	
DCYC221CA-C	22.48x22.0x13.0	0.47~100.0	7.2~ 75.5	8.0 ~ 100.0	0.50~39.5	
 Copper-Iron Cofiring Type	DCSC110730A-E	11.0x7.0x3.0	0.18~0.27	56.0	30.0~42.0	0.6~1.2
	DCSC110736A-E	11.0x7.0x3.6	0.18~0.27	/	30.0~50.0	0.4~1.1
	DCSC100750A-E	10.0x6.9x5.0	0.08~0.22	56.0	55.0~90.0	0.40



Product Diagram	Automotive Part Number	Dimensions	Inductance Range	I _{rms}	I _{sat}	DCR Max
		(L X W X H) mm	(μH)	(A)	(A)	(mΩ)
 Coupling Type	DCHA1080A-C	11.0 x 10.0 x 8.2	10.0~22.0	3.1~4.8	7.5 ~ 11.2	40.45~84.07
 T-Core Type	DCTA201610S-E	2.0 x 1.6 x 1.0	0.1~3.3	1.2~6.5	1.5~9.0	9.0~250.0
	DCTA252012S-E	2.5x2.0x1.2	0.15~4.7	1.5~5.8	2.1~8.7	12.8~200.0
	DCTA322512S-E	3.2 x 2.5 x 1.2	0.15~6.8	1.3~6.8		12.0~220.0
	DCTA0420A-E	4.1 x 4.1 x 2	0.12~4.7	5.5~22.0	4~24	1.3~52.0 2.0~11.6
	DCTA0531A-C	5.5x5.3x3.1	0.33~4.7	6.0~19.0	5.5~23.0	3.5~26.5
	DCTA0754A-C	7.5x 7.2 x 5.4	2.2~10.0	5.0~13.0	6.0~15.0	6.4~25.0
 Molded Type	DCHA0754A-C	7.5 x 7.2 x 5.4	1.0~100	1.5~15.0	2.4 ~ 20.0	6.0~385.0
	DCHA0854A-C	8.1 x 8.0 x 5.4	1.0~47.0	2.5~14.0	2.6 ~ 15	4.8~137
	DCHA1054A-C	10.85 x 10.0 x 5.4	0.68~47.0	3.6~28.8	4.2 ~ 39.4	2.22~103.0
	DCYA0420A-T	4.4 x 4.2 x 2.0	0.24 ~ 22.0	1.2 ~ 13.0	1.65 ~ 19.0	6.4 ~ 408.0
	DCYA0530A-T	5.15 x 5.10 x 3.0	0.20 ~ 22.0	1.9 ~ 22.2	2.3 ~ 21.0	2.31 ~ 250.0
	DCYA0730A-T	7.1 x 6.6 x 3.0	0.15 ~ 33.0	2.0 ~ 26.0	2.6 ~ 52.0	2.5 ~ 242.0
	DCYA1030A-T	11.1 x 10.2 X 3.0	0.12~ 22.0	3.0 ~ 30.0	5.0~ 75.0	0.61 ~ 99.0
	DCYA1040A-T	11.1 x 10.0 X 4.0	0.20 ~ 22.0	5.0~ 32.0	5.5~45.0	0.72 ~ 66.0
	DCYA1050A-T	11.1 x 10.0 X 5.0	0.47~6.8	7.5~29.0	9.5~ 32.0	1.14~24.0
	DCYA1350A-T	13.3 x 12.2 x 5.0	0.10 ~ 33.0	5.2~ 55.0	8.0 ~118.0	0.59 ~ 85.5
	DCYA1365A-T	13.3 x 12.5 x 6.5	0.47 ~3.3	15.0~38.0	40.0~63.0	1.2~4.5
	DCYA1770A-T	17.2 x 16.85 X 7.0	1.5 ~ 68.0	5.2~ 40.0	6.5 ~ 40.0	2.15 ~ 85.0
	DCYA0530A-F	5.15x5.1x3.0	0.20~ 10.0	2.4 ~ 15.8	2.3 ~ 18.0	2.3 ~ 108.0
	DCYA0730A-F	7.1x6.8x3.0	0.15 ~ 33.0	1.6~ 18.5	2.3 ~ 36.0	1.8 ~ 242.0
	DCYA1040A-F	11.1x10.0x4.0	0.20 ~ 100.0	1.5 ~33.0	2.0~ 40.0	0.72 ~ 300.0
	DCYA1350A-F	13.3x12.2x5.0	0.10 ~ 33.0	4.0 ~ 43.0	7.0~80.0	0.59 ~ 85.5
	DCYA1365A-F	13.2x12.5x6.5	0.22 ~ 56.0	4.6 ~ 48.0	4.6 ~100.0	0.70 ~ 65.0
	DCYA1770A-F	17.2x16.85x7.0	1.0~ 68.0	5.2~33.0	6.0~48.0	1.55 ~ 60.0
	DCYA0530A-C	5.4x5.2x3.0	0.20~10.0	2.8 ~ 20.5	2.3 ~ 20.0	2.0~108.0
	DCYA0730A-C	7.0x6.6x3.0	0.20~10.0	2.8 ~ 20.5	2.3 ~ 20.0	2.0~108.0
	DCYA1040A-C	10.8x10x4.0	0.20~68.0	2.2 ~ 43.0	3.0~ 60.0	0.72~210.0
	DCYA1050A-C	10.8x10.0x5.0	0.68~68.0	2.3 ~ 24.5	4.0 ~ 30.0	1.93~211.0
	DCYA1350A-C	13.45x12.6x5.0	0.10~33.0	4.5 ~ 43.0	5.2 ~ 80.0	0.59~58.0
	DCYA1365A-C	13.45x12.6x6.5	0.22~33.0	5.0~ 52.0	7.5 ~ 100.0	0.60~45.0
	DCYA1770A-C	17.15x17.15x7.0	1.0~68.0	5.0 ~ 36.0	6.0~ 50.0	1.46~60.0
	DCYA191CA-C	19.6x18.8x13.0		2.2	32.0	48.0
DCYA221CA-C	22.48x22.0x13.0		0.47~100.0	6.4 ~ 66.0	8 ~ 100.0	0.50~39.5

