

ChenYang Soft Ferrite Materials

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Contact Address:

Markt Schwabener Str. 8
D-85464 Finsing
Germany

Tel: +49 (0)8121-2574100, 2574108

Fax: +49 (0)8121-2574101

Email: info@cy-magnetics.com

<http://www.cy-magnetics.com>

Mn-Zn Materials with High Permeability (CY-HP Series)

Parameters	Conditions	Unit	CY-HP5	CY-HP5B	CY-HP7	CY-HP7B	CY-HP10	CY-HP12	CY-HP15
Initial Permeability(μ_i)	10kHz, 0.1mT, 25°C	-	5000 ±25%	5500 ±25%	7000 ±25%	7500 ±25%	10000 ±30%	12000 ±30%	15000 ±30%
Relative Loss Factor (Tan d / μ_i)	100kHz	ppm (10^{-6})	<6.5	<15	<7.0	<20	<7.0	<10	<7.0
Temperature Coefficient of Initial Permeability	20°C ~ 60°C	ppm ($10^{-6}/^{\circ}\text{C}$)	-0.5~ 2.0	-0.5~ 2.0	-0.5~ 2.0	-0.5~ 2.0	-0.5~ 2.0	-0.5~ 2.5	-0.5~ 2.0
Saturation Flux Density	1200A/m, 25°C	mT	420	420	410	410	400	380	360
Remanence (Br)	25°C	mT	140	150	100	90	100	100	100
Coercivity (Hc)	25°C	A/m	8	8	7.5	6	7.2	3	2.5
Electrical Resistivity	-	Ohm m	1	1	0.3	0.3	0.15	0.15	0.15
Disaccommodation factor (DF)	-	ppm (10^{-6})	<3.0	<3.0	<2.5	<2.5	<2.0	<2.0	<2.0
Curie Temperature (Tc)	-	°C	>135	<135	>125	<125	>120	<120	>110
Density (d)	-	g/cm ³	4.8	4.8	4.9	4.9	4.9	4.9	4.95

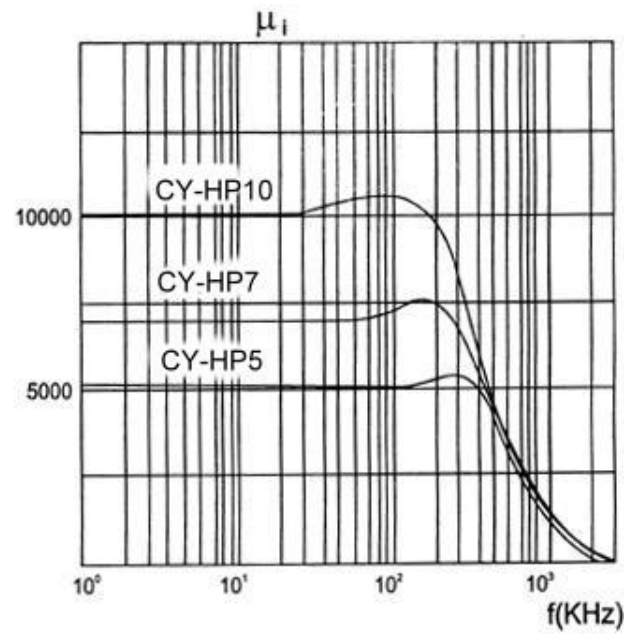
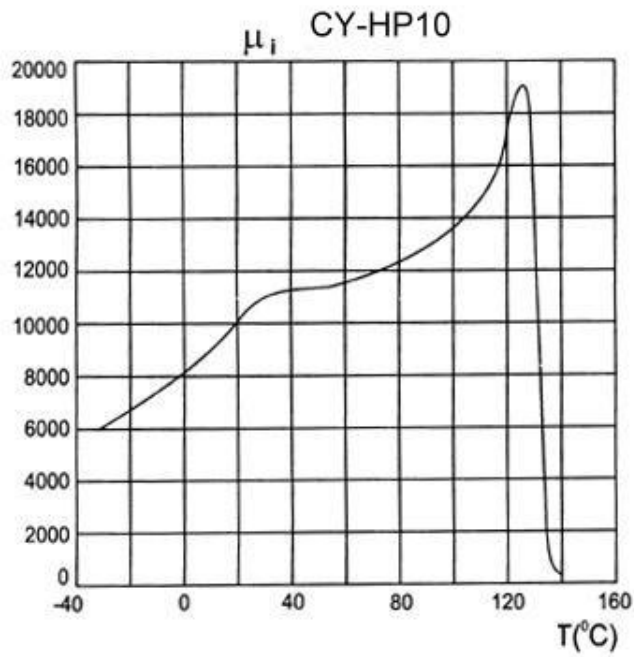
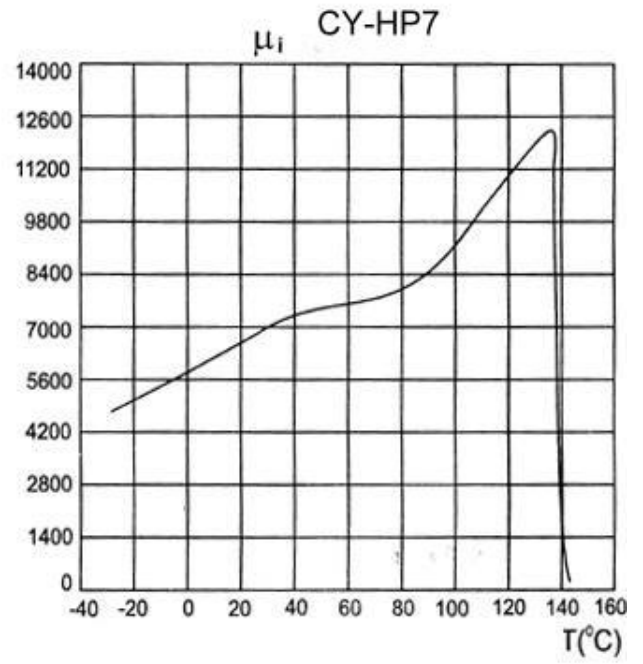
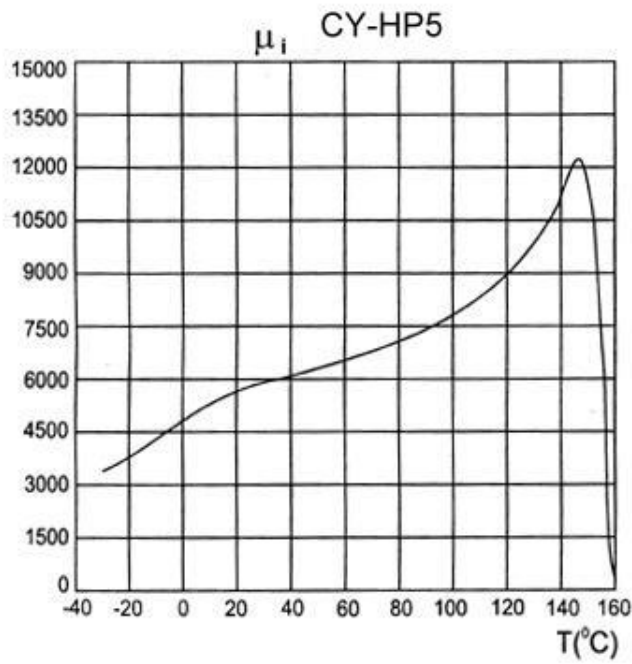
Mn-Zn Materials with Middle Permeability (CY-MP Series)

Parameters	Test Conditions	Unit	CY-MP2	CY-MP2A	CY-MP2B	CY-MP3	CY-MP3B	CY-MP4B
Initial Permeability (μ_i)	10kHz, 0.1mT, 25°C	-	2000 ±25%	2300 ±25%	2500 ±25%	3000 ±25%	3800 ±25%	4500 ±25%
Relative loss factor (tan d / μ_i)	100kHz	ppm (10^{-6})	4	4	5	4.5	4.5	5
Saturation Flux Density	1200A/m, 25°C	mT	480	500	500	470	480	500
	1200A/m, 100°C	mT	300	390	390	370	340	390
Remanence (Br)	25°C	mT	120	95	117	120	180	120
	100°C	mT	60	55	60	85	-	-
Coercivity (Hc)	25°C	A/m	16	14	12	12	16	-
	100°C	A/m	7	9	10	7	-	-
Core Loss (Pc)	25kHz, 0.2T, 25°C	K/wm ³	168	120	130	-	720	-
	25kHz, 0.2T, 100°C	K/wm ³	154	70	100	160	860	-
	100kHz, 0.2T, 100°C	K/wm ³	-	450	600	-	-	800
Electrical Resistivity	DC, 25°C	Ohm m	6.5	6.5	6.5	5	4	1
Curie Temperature (Tc)	-	°C	>210	>215	>230	>220	>190	>180
Density (d)	-	g/cm ³	4.8	4.8	4.8	4.8	4.8	4.85

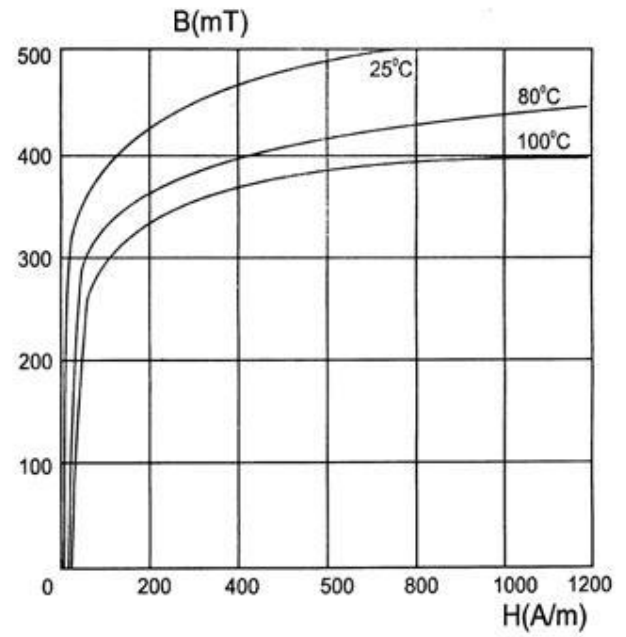
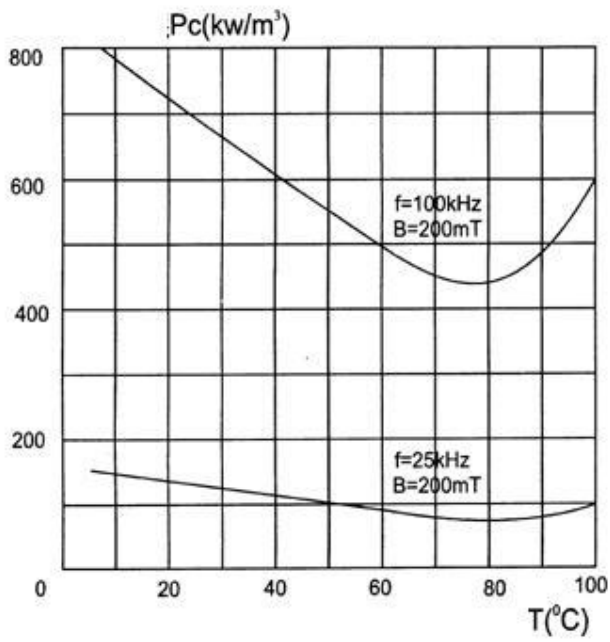
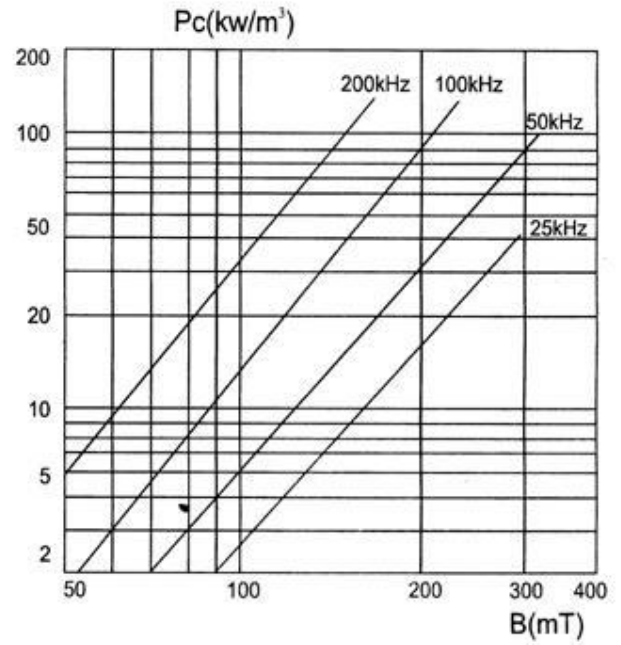
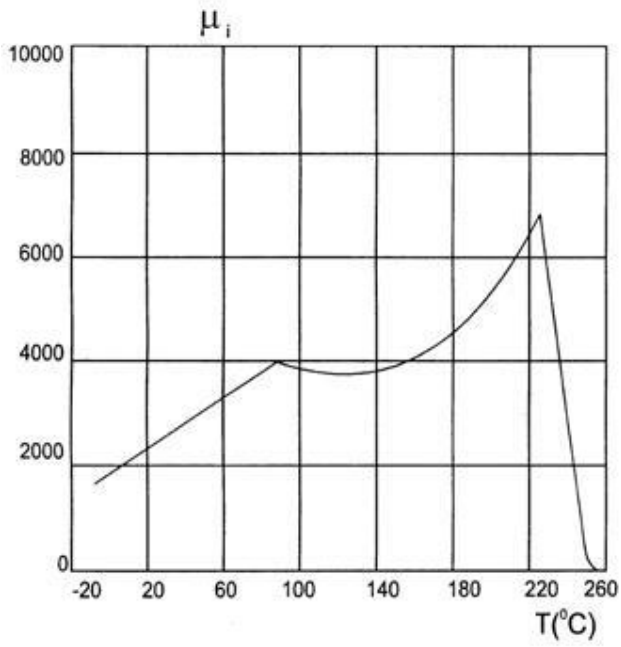
Ni-Zn Soft Ferrite Materials

Material Grade	Frequency Range, MHz	Initial Permeability (μ_i)	Curie Temperature, °C	Density (d), g/cm ³	Relative Loss Factor Tan d / μ_{iac} , 10 ⁻⁶	Temperature Coefficient of μ_i , 10 ⁻⁶ /°C (20°C-60°C)
CY-LP001	10-150	10±20%	>350	4.5	<400 (70MHz)	80-100
CY-LP002	5-100	20±20%	>300	4.5	<400 (60MHz)	50-70
CY-LP004	2-60	40±20%	>300	4.5	<350 (40MHz)	25-50
CY-LP006	1-40	60±20%	>300	4.5	<100 (20MHz)	20-50
CY-LP010	0.5-20	100±20%	>300	4.6	<160 (20MHz)	55-130
CY-LP020	0.3-7	200±20%	>200	4.7	<105 (7MHz)	15-35
CY-LP025	<10	250±20%	>250	4.6	<40 (795kHz)	6
CY-LP050	<2.0	500±20%	>180	4.8	<30 (0.1MHz)	8
CY-LP060	0.1-2.0	600±20%	>180	4.5	<400 (0.1MHz)	3
CY-LP070	0.1-1.5	700±20%	>180	4.8	<250 (1.5MHz)	7
CY-LP075	<1.5	750±20%	>150	4.8	<25 (0.1MHz)	4
CY-LP080	0.1-2	800±20%	>125	4.6	<60 (2MHz)	10-30
CY-LP100	0.1-1.5	1000±20%	>150	4.9	<280 (1.0MHz)	2-5.0
CY-LP120	<1.0	1200±20%	>125	4.7	<80 (2MHz)	8-35
CY-LP150	0.01-0.5	1500±20%	>120	4.9	<60 (0.5MHz)	3-5
CY-LP180	0.01-0.5	1800±20%	>120	4.5	<350 (40MHz)	2-5
CY-LP200	0.01-0.5	2000±20%	>120	4.8	<60(0.5MHz)	2-5
CY-LP220	0.01-0.5	2200±20%	>120	4.8	<60 (0.5MHz)	2-5

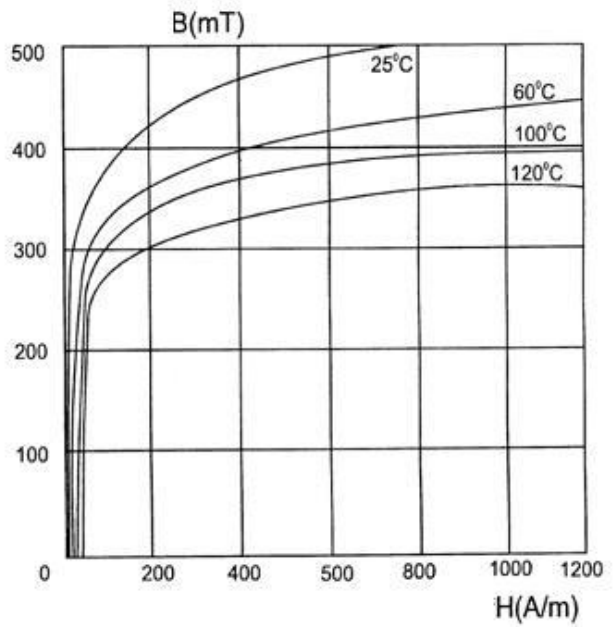
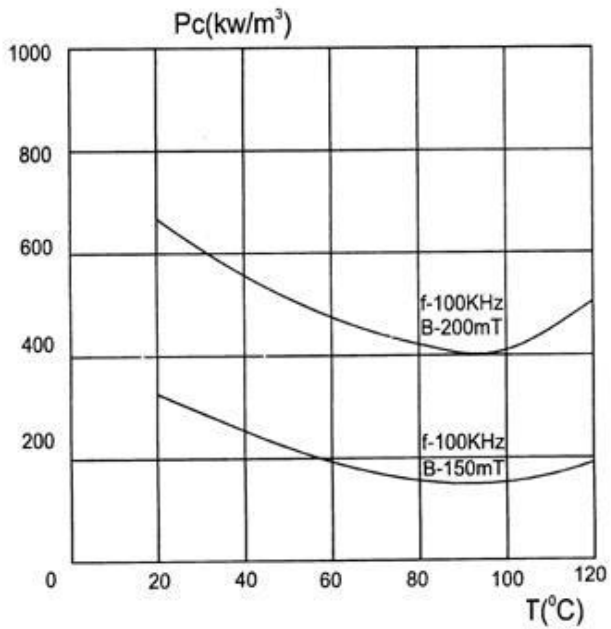
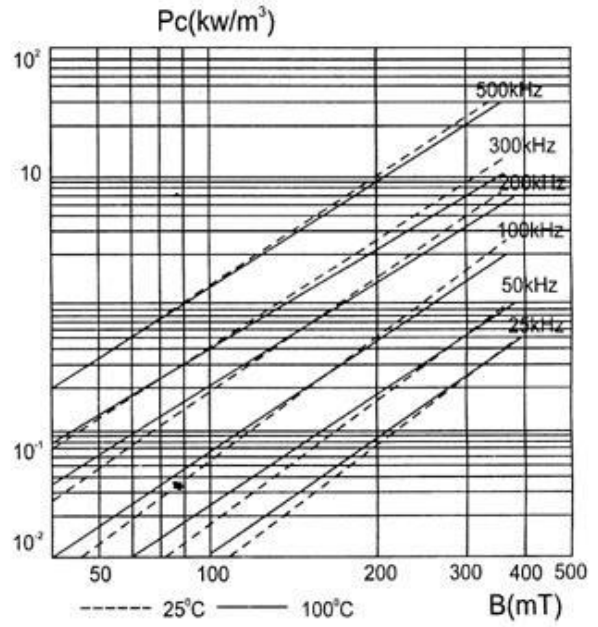
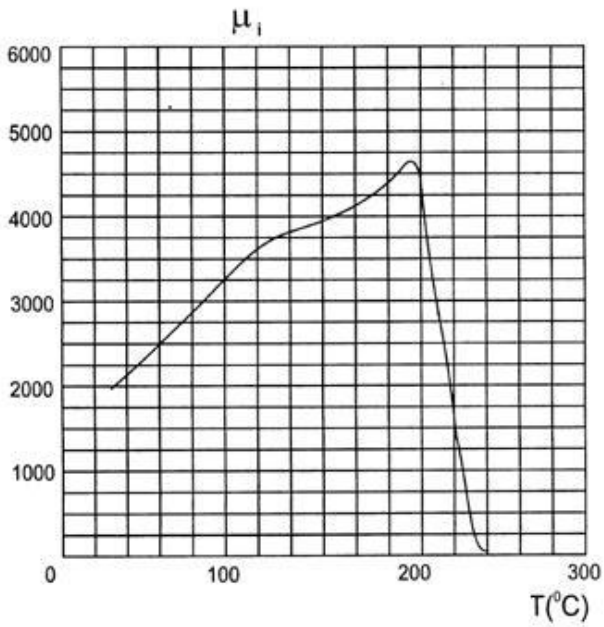
Characteristic Curves



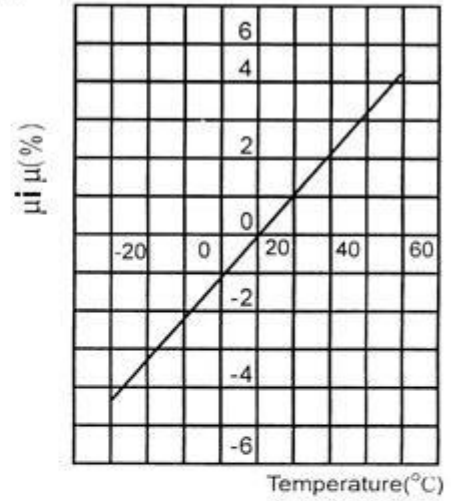
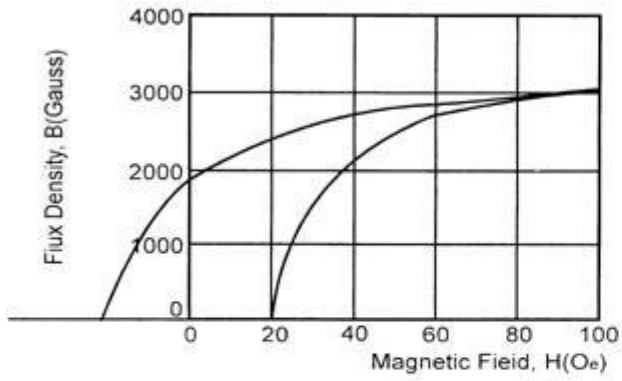
Mn-Zn CY-MP2B



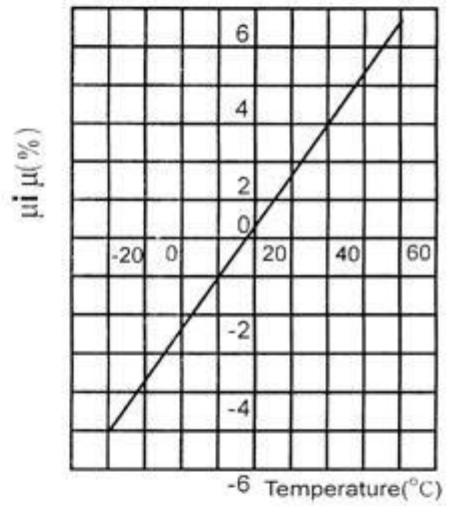
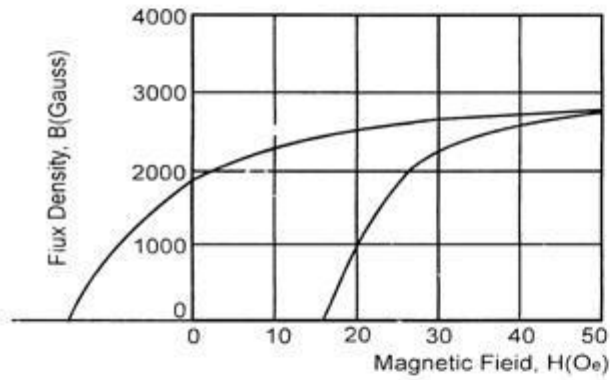
Mn-Zn CY-MP2A



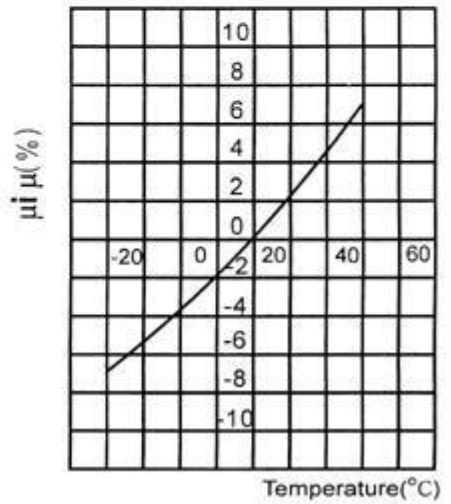
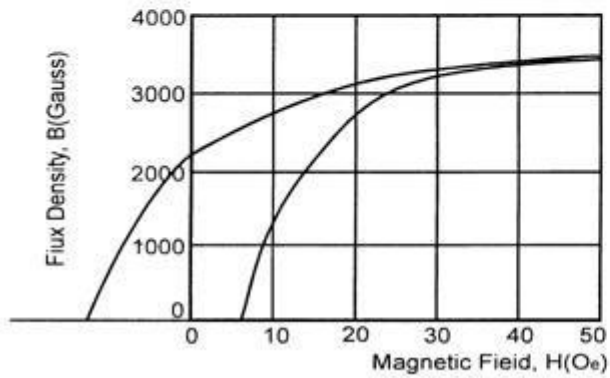
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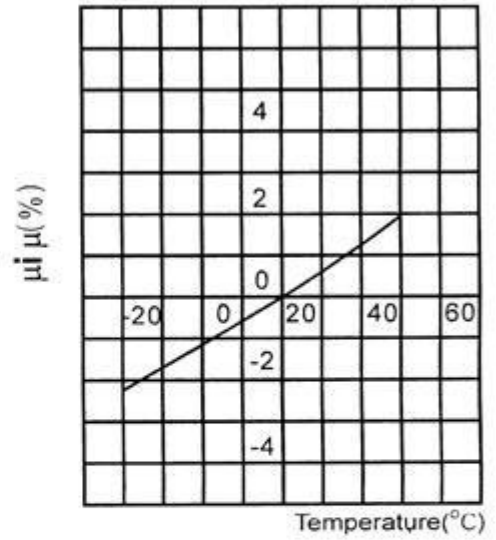
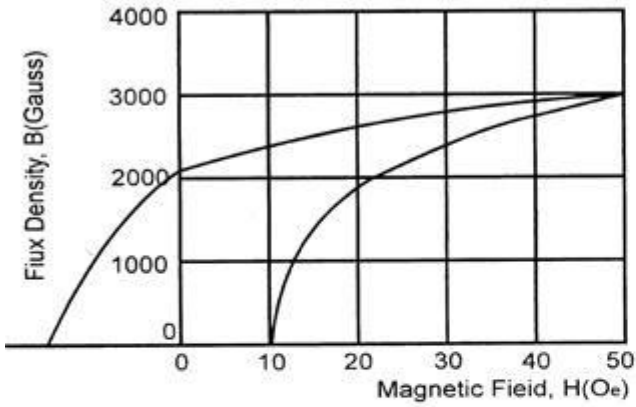
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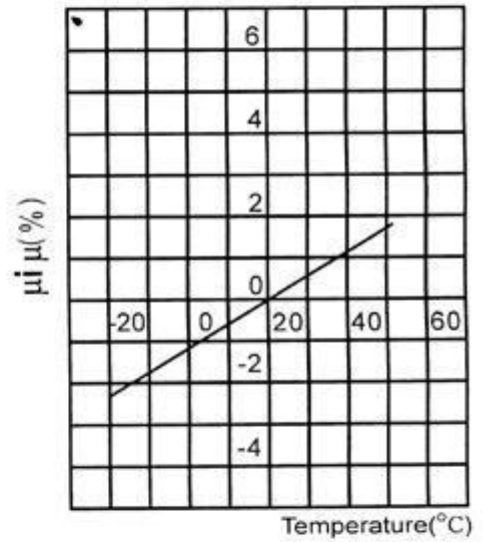
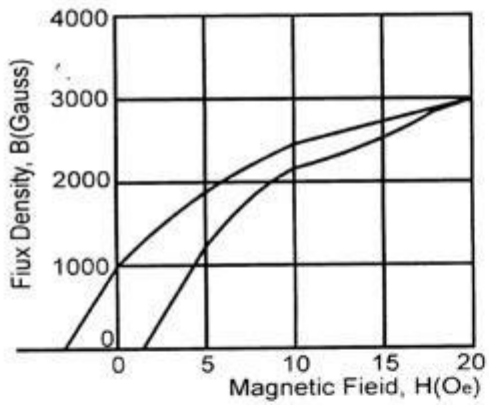
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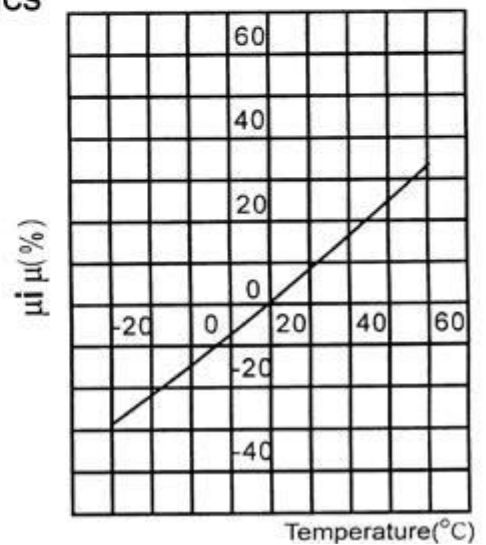
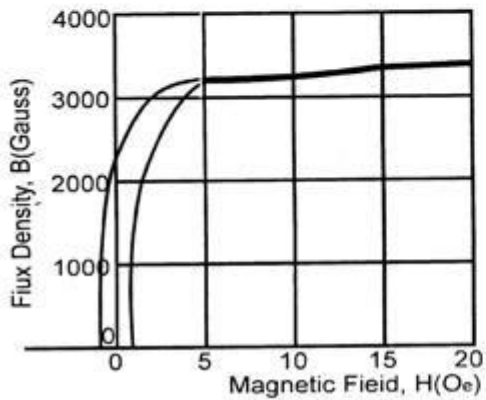
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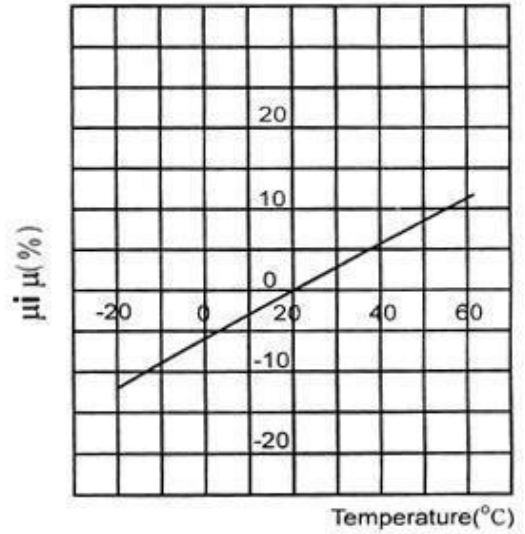
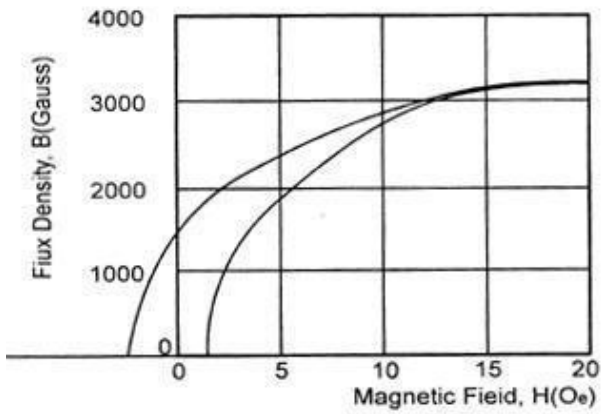
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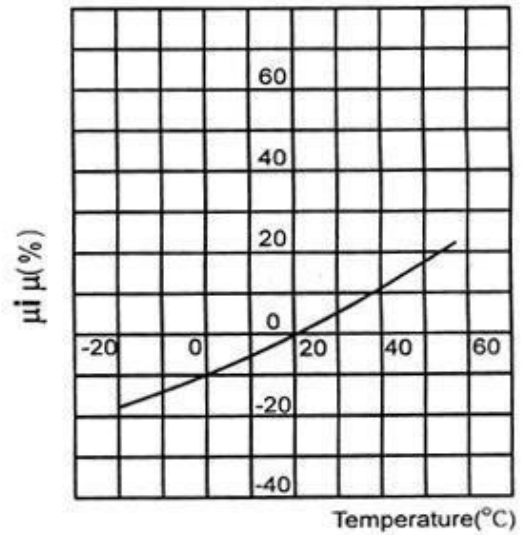
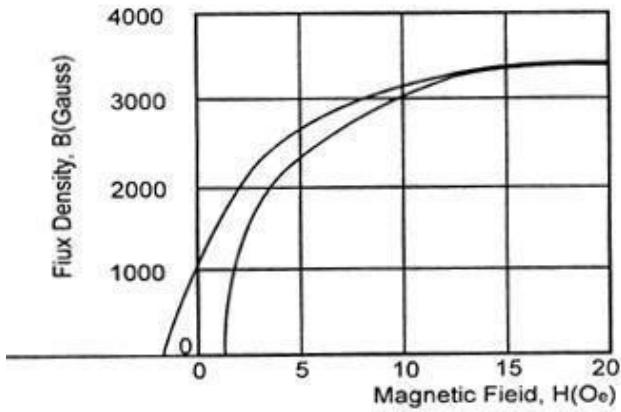
CY-LP020 Characteristics



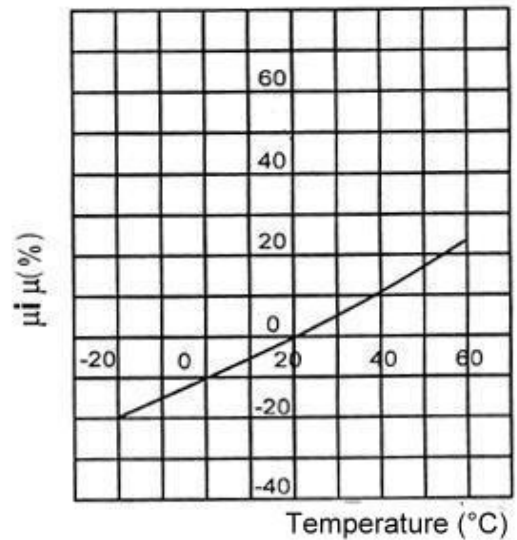
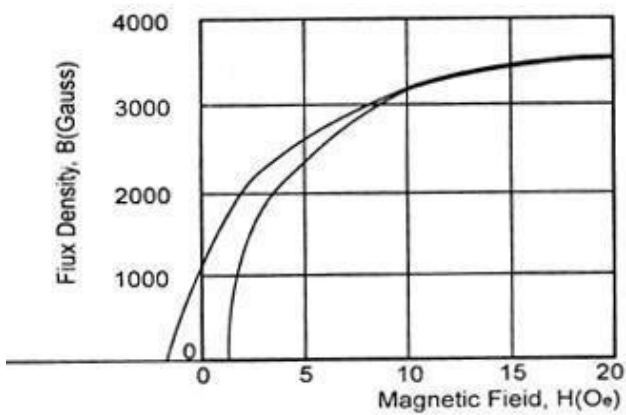
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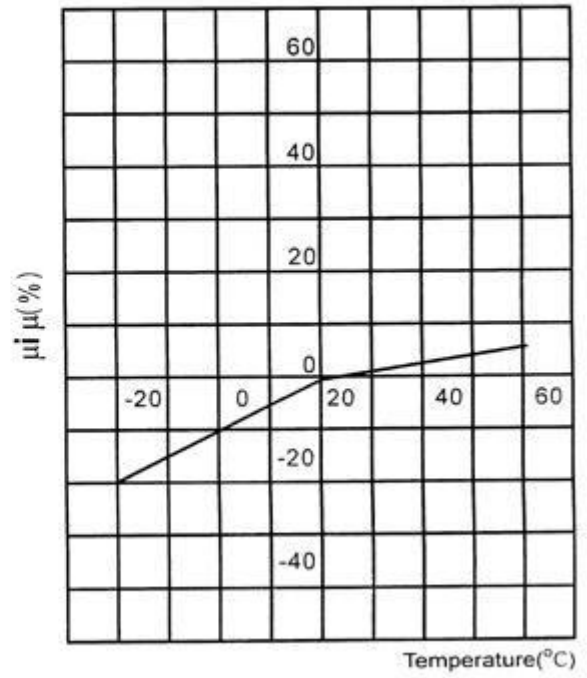
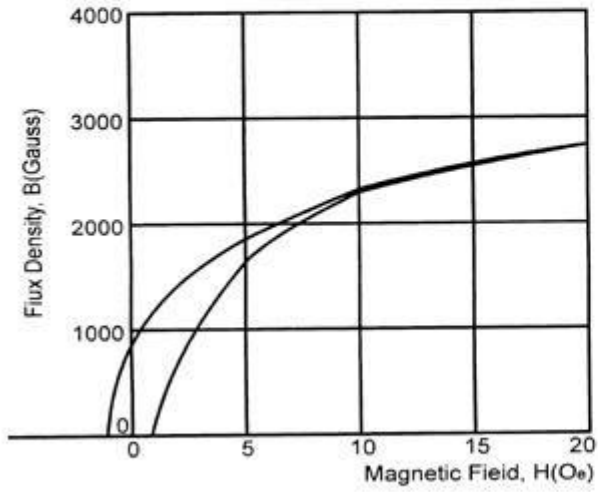
CY-LP100 Characteristics



CY-LP150 Characteristics



CY-LP080 Characteristics



CY-LP120 Characteristics

