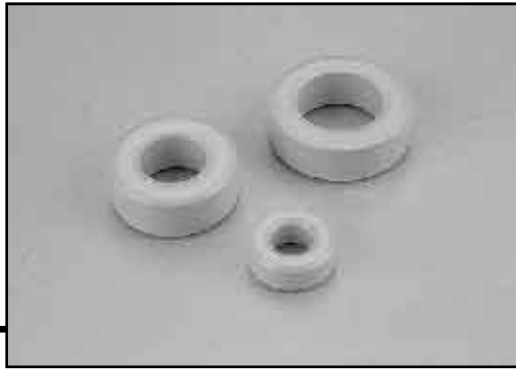


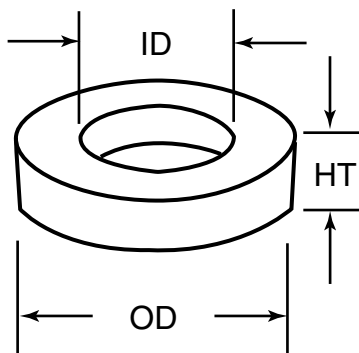
IRON POWDER CORES



APPLICATIONS AND CHARACTERISTICS

For design frequency below 300KHz, iron core is a preferred choice for RF CIRCUITS, DC POWER SUPPLY CHOKES, MOTORS, DIMMER CONTROL FILTERS and other EMI/RFI CIRCUITS. Various types of cores are designed as standard series as listed in the catalog. None standard cores may be designed and produced to meet customer's specifications as requested.

• Shape:



EPOXY COATING: 94V-O
COLOR CODE: YELLOW/WHITE

IRON POWER MATERIAL PROPERTIES

PROPERTY	UNIT	SYMBOL	J2	J5	J8
Initial Permeability		μ_i	75	75	55
Curie Temperature	°C	T _c	≥300	—	—
Practical Frequency Range	KHz		1-300	1-1000	—
Specific Gravity		d	6.7	6.7	—
Temperature Stability	ppm/°C		780	700	—

TEMPERATURE EFFECTS

Iron cores are best suited operating under the temperature range 55 °C and 125 °C. Because iron core does not have low curie temperature, it will function to several hundred °C. However, continued operation above 200 °C may result in permanent shift of characteristics.

• Dimensions and Magnetic Parameters

PART NO.	OD	ID	HT	AL nH/N ² ± 10		
	(mm)	(mm)	(mm)	J2	J5	J8
IR-25	6.48	3.05	2.44	24.5	23.0	17.0
IR-26	6.73	2.67	4.83	57.0	56.0	41.5
IR-30	7.80	3.84	3.25	33.5	30.5	22.0
IR-37	9.53	5.21	3.25	28.5	26.0	19.0
IR-44	11.20	5.82	4.04	37.0	35.0	25.5
IR-50	12.70	7.70	4.83	33.0	33.0	24.0
IR-50B	12.70	7.70	6.35	43.5	43.5	32.0
IR-50D	12.70	7.70	9.53	72.0	66.0	—
IR-60	15.20	8.53	5.94	50.0	47.0	34.5
IR-68	17.50	9.40	4.83	43.5	40.0	29.0
IR-68A	17.50	9.40	6.35	58.0	54.0	39.5
IR-80	20.20	12.60	6.35	46.0	42.0	31.0
IR-80B	20.20	12.60	9.53	71.0	63.0	46.5
IR-80D	20.20	12.60	12.70	92.0	83.0	—

SMD
CHIP BEAD
/INDUCTOR

SMD
POWER
INDUCTOR

EMI
CORES
NI-ZN

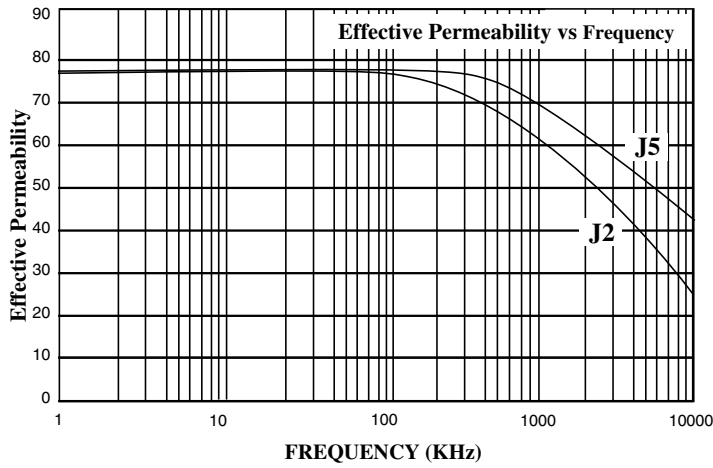
COILS

TOROID
CORES
MN-ZN

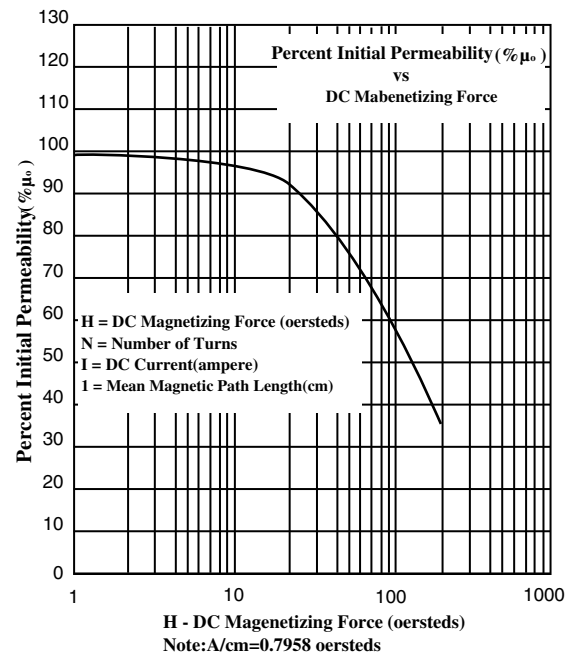
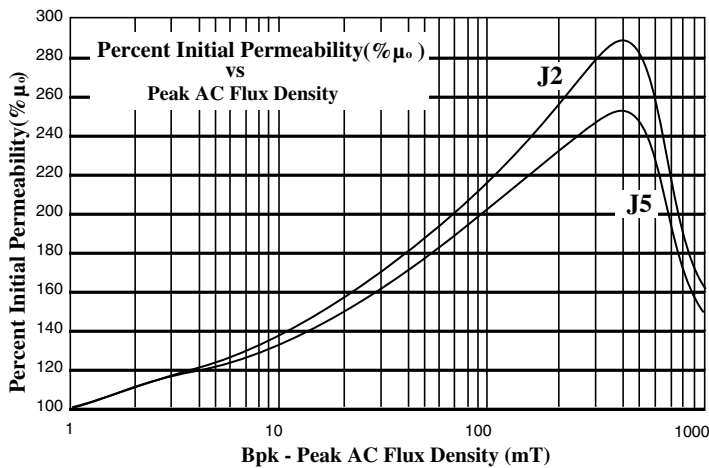
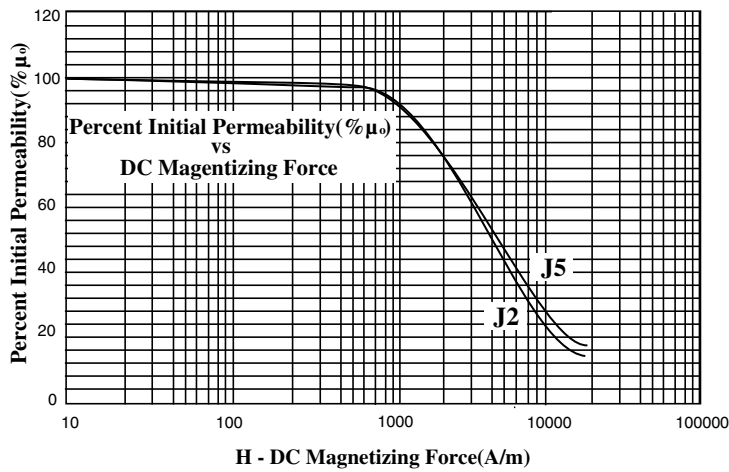
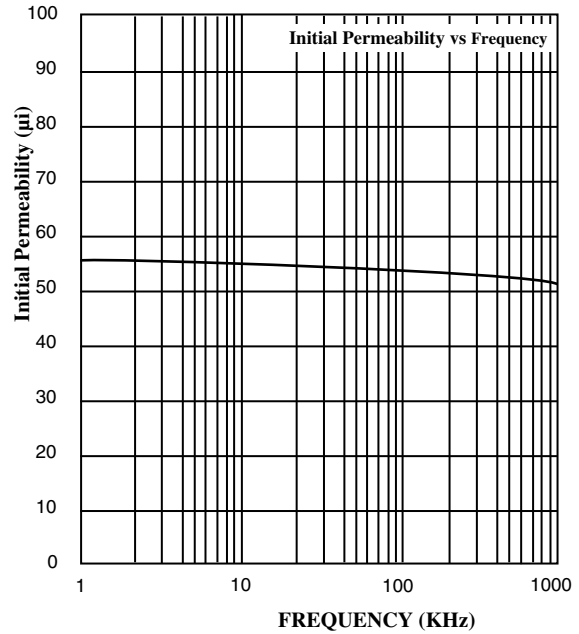
IRON
POWDER
CORES

	PART NO.	OD	ID	HT	AL nH/N ² ± 10		
		(mm)	(mm)	(mm)	J2	J5	J8
SMD CHIP BEAD /INDUCTOR	IR-90	22.90	14.00	9.53	70.0	64.0	47.0
SMD POWER INDUCTOR	IR-106	26.90	14.50	11.10	93.0	95.0	70.0
	IR-106B	26.90	14.50	14.60	124.0	124.0	91.0
EMI CORES NI-ZN	IR-130	33.00	19.80	11.10	81.0	79.0	58.0
	IR-150	38.40	21.50	11.10	96.0	89.0	—
	IR-150A	38.40	21.50	8.26	66.0	—	—
COILS	IR-157	39.90	24.10	14.50	100.0	99.0	73.0
	IR-184	46.70	24.10	18.00	169.0	159.0	116.0
	IR-200	50.80	31.80	14.00	92.0	92.0	67.0
	IR-200B	50.80	31.80	25.40	160.0	155.0	120.0
TOROID CORES MN-ZN	IR-225	57.20	35.70	14.00	98.0	92.0	67.0
	IR-225B	57.20	35.70	25.40	160.0	155.0	—
	IR-250	63.50	31.80	25.40	242.0	242.0	177.0
	IR-300	77.20	49.00	12.70	80.0	80.0	58.0
IRON POWDER CORES	IR-300D	77.20	49.00	25.40	160.0	160.0	—
	IR-400	102.00	57.20	16.50	131.0	131.0	96.0
	IR-400D	102.00	57.20	33.00	262.0	—	—
	IR-520	132.00	78.20	20.30	149.0	137.0	—
	IR-520D	132.00	78.20	40.60	—	—	—
	IR-650	165.10	88.90	50.80	434.0	405.0	—

performance curves J2 vs J5



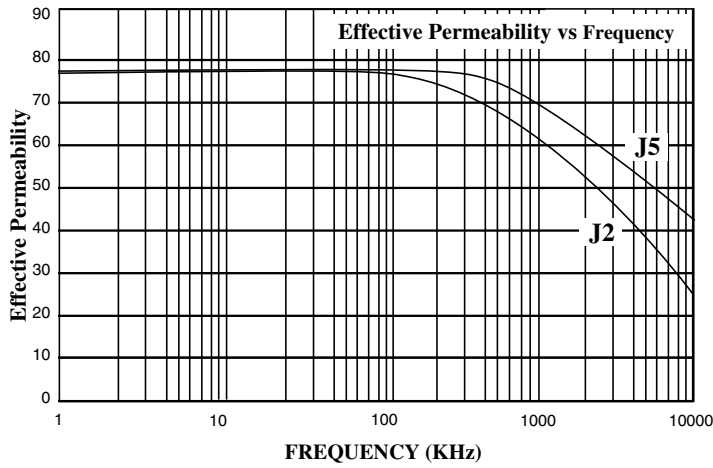
performance curves J8



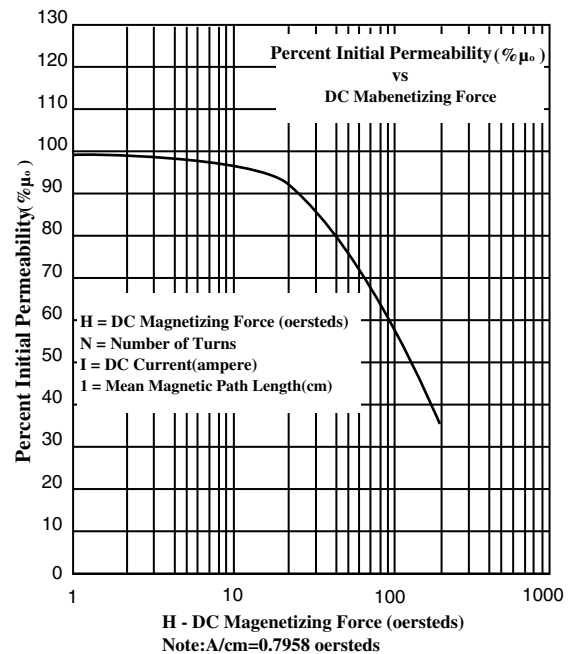
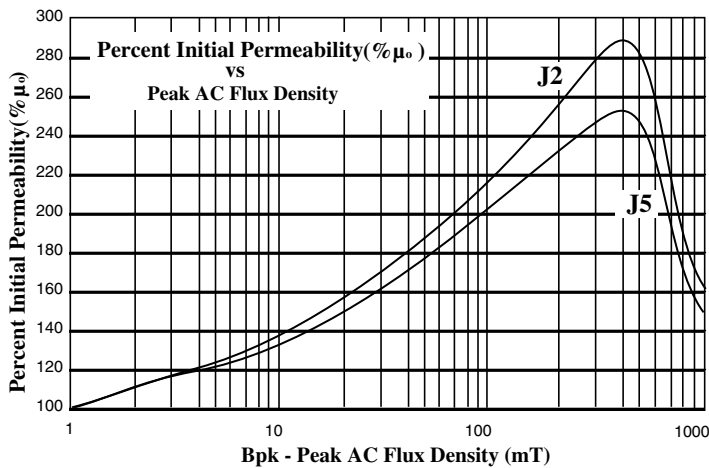
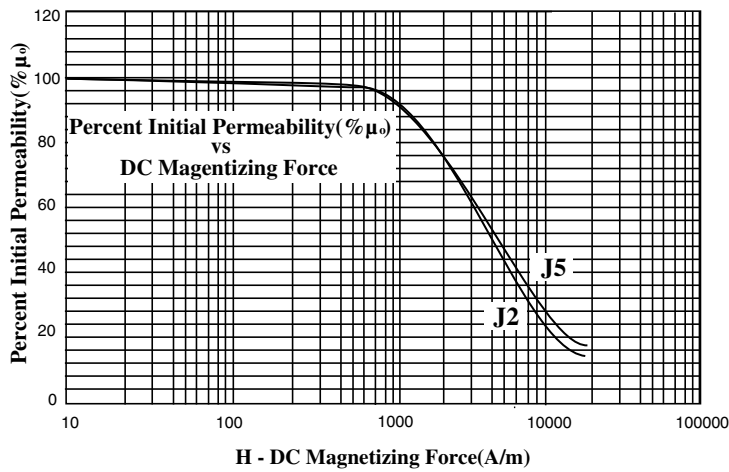
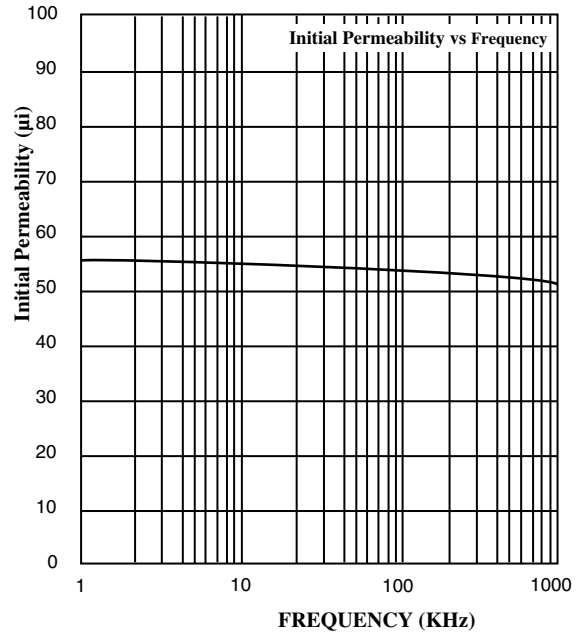
- SMD CHIP BEAD / INDUCTOR
- SMD POWER INDUCTOR
- EMI CORES Ni - Zn
- COILS
- TOROID CORES Mn - Zn
- IRON POWDER CORES

	PART NO.	OD	ID	HT	AL nH/N ² ± 10		
		(mm)	(mm)	(mm)	J2	J5	J8
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	IR-150A	38.40	21.50	8.26	66.0	—	—
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	IR-225B	57.20	35.70	25.40	160.0	155.0	—
	IR-250	63.50	31.80	25.40	242.0	242.0	177.0
	IR-300	77.20	49.00	12.70	80.0	80.0	58.0
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	IR-400	102.00	57.20	16.50	131.0	131.0	96.0
	IR-400D	102.00	57.20	33.00	262.0	—	—
	IR-520	132.00	78.20	20.30	149.0	137.0	—
	IR-520D	132.00	78.20	40.60	—	—	—
	IR-650	165.10	88.90	50.80	434.0	405.0	—

performance curves J2 vs J5



performance curves J8



- SMD CHIP BEAD / INDUCTOR
- SMD POWER INDUCTOR
- EMI CORES Ni - Zn
- COILS
- TOROID CORES Mn - Zn
- IRON POWDER CORES