

High Current Molded Inductor (HCM Series)

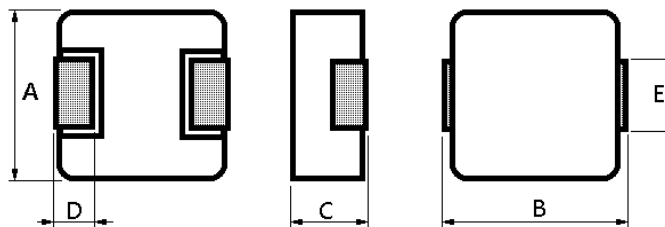
RoHS 2.0
2011/65/EU



Description :

HCM Series (High Current Molded Inductor) is a SMD type inductor with low profile and low DCR. Due to the magnetically shielded construction and sendust material, the working frequency is up to 3MHz with ultra low buzz noise. It's often used for DC/DC converters because it handles high transient current spikes without saturation and the operating temperature is -40°C to 125°C.

Dimension :



Series	A (mm max)	B (mm max)	C (mm max)	D (mm +/- 0.3)	E (mm +/- 0.5)
HCM4320	4.35	4.85	2.00	0.76	2.05
HCM5420	5.45	5.75	2.00	1.02	2.55
HCM6730	6.75	7.25	3.00	1.60	3.00
HCM8240	8.25	8.90	4.00	1.80	3.20
HCM10540	10.50	11.80	4.00	2.30	3.00

High Current Molded Inductors (HCM Series)

HCM4320 Series :

Part Number	Inductance	DCR (mΩ)		Isat (A)	Irms (A)
	uH +- 20%	Typical	Max	Typical	Typical
HCM4320-1R5	1.5 uH	46.0 mΩ	50.0 mΩ	4.5 A	4.0 A
HCM4320-2R2	2.2 uH	64.0 mΩ	68.0 mΩ	3.2 A	3.2 A
HCM4320-6R8	6.8 uH	155.0 mΩ	162.0 mΩ	1.6 A	1.5 A

HCM5420 Series :

Part Number	Inductance	DCR (mΩ)		Isat (A)	Irms (A)
	uH +- 20%	Typical	Max	Typical	Typical
HCM5420-2R2	2.2 uH	34.5 mΩ	37.7 mΩ	5.5 A	5.0 A
HCM5420-6R8	6.8 uH	106.0 mΩ	121.0 mΩ	2.1 A	2.8 A

HCM6730 Series :

Part Number	Inductance	DCR (mΩ)		Isat (A)	Irms (A)
	uH +- 20%	Typical	Max	Typical	Typical
HCM6730-1R0	1.0 uH	7.0 mΩ	8.0 mΩ	9.5 A	12.5 A
HCM6730-1R5	1.5 uH	10.2 mΩ	12.0 mΩ	8.5 A	10.5 A
HCM6730-2R2	2.2 uH	14.7 mΩ	16.5 mΩ	7.0 A	9.0 A
HCM6730-6R8	6.8 uH	41.0 mΩ	46.8 mΩ	4.0 A	5.5 A
HCM6730-100	10.0 uH	64.5 mΩ	71.2 mΩ	3.5 A	4.0 A
HCM6730-150	15.0 uH	108.0 mΩ	118.0 mΩ	3.0 A	3.0 A

HCM8240 Series :

Part Number	Inductance	DCR (mΩ)		Isat (A)	Irms (A)
	uH +- 20%	Typical	Max	Typical	Typical
HCM8240-3R3	3.3 uH	12.5 mΩ	14.9 mΩ	9.7 A	10.5 A
HCM8240-4R7	4.7 uH	19.8 mΩ	22.6 mΩ	8.7 A	8.0 A
HCM8240-5R6	5.6 uH	24.5 mΩ	28.6 mΩ	7.6 A	7.4 A
HCM8240-6R8	6.8 uH	28.3 mΩ	33.4 mΩ	6.7 A	7.0 A
HCM8240-220	22.0 uH	70.5 mΩ	94.3 mΩ	3.3 A	4.3 A
HCM8240-330	33.0 uH	115.0 mΩ	144.0 mΩ	3.2 A	3.2 A

High Current Molded Inductors (HCM Series)

HCM10540 Series :

Part Number	Inductance	DCR (mΩ)		Isat (A)	Irms (A)
	uH +- 20%	Typical	Max	Typical	Typical
HCM10540-R22	0.22 uH	0.8 mΩ	1.0 mΩ	44 A	33 A
HCM10540-R27	0.27 uH	0.8 mΩ	1.0 mΩ	44 A	33 A
HCM10540-R36	0.36 uH	1.0 mΩ	1.2 mΩ	30 A	32 A
HCM10540-R47	0.47 uH	1.4 mΩ	1.7 mΩ	30 A	30 A
HCM10540-R82	0.82 uH	2.2 mΩ	2.3 mΩ	22 A	25 A
HCM10540-1R0	1.0 uH	2.5 mΩ	3.3 mΩ	20 A	25 A
HCM10540-1R5	1.5 uH	3.5 mΩ	4.3 mΩ	16 A	17 A
HCM10540-2R2	2.2 uH	7.8 mΩ	8.5 mΩ	12 A	15 A
HCM10540-4R7	4.7 uH	13.8 mΩ	14.2 mΩ	7.6 A	9.5 A
HCM10540-6R8	6.8 uH	18.7 mΩ	19.3 mΩ	7.5 A	9.0 A
HCM10540-8R2	8.2 uH	25.5 mΩ	28.0 mΩ	7.3 A	8.0 A
HCM10540-100	10.0 uH	28.3 mΩ	30.5 mΩ	7.1 A	7.5 A
HCM10540-220	22.0 uH	61.3 mΩ	66.0 mΩ	4.5 A	5.0 A
HCM10540-470	47.0 uH	129.0 mΩ	145.0 mΩ	3.0 A	3.3 A

Note 1 : measure condition : 100kHz, 0.25V.

Note 2 : Isat (Saturation Current) : the DC current when the inductance decrease 30% of L0A.

Note 3 : Irms (Temperature rise current) : the DC current when the temperature rise is $\Delta T 40^{\circ}\text{C}$.