

# **Electrical / Environmental**

# **HM67**





# Surface Mount Common Mode Chokes

Operating Temperature Range

-40 °C to +125 °C

Ambient Temperature, Maximum

85°C

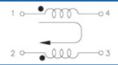
• Temperature Rise, Maximum

40°C

Dielectric Withstanding Voltage

300Vdc

#### **Schematic**

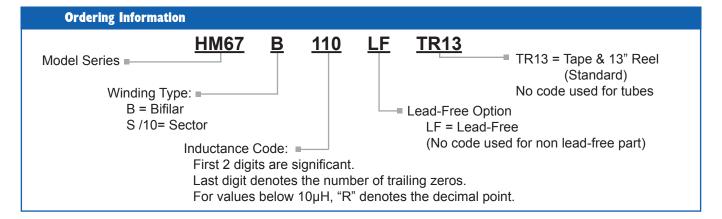


Specifi	cations						
Part Number	Terminals	Common Mode Inductance @ IOO kHz - O.1 V (I-4 or 2-3) µH	Inductance Leakage @ IOO kHz - O. I Vrms (I-4) <sup>(I)</sup> Typ. μΗ	Rated Current mA	DCR <sup>(2)</sup> Max. mΩ	Marking Code	Figure
HM67-B5R0	1-4, 2-3	5.0 ±30%	0.08	1000	7.2	А	1
HM67-B110	1-4, 2-3	11.0 ±30%	0.10	500	5.8	В	1
HM67-S250	1-4, 2-3	25.0 ±30%	1.60	500	9.8	С	1
HM67-B510	1-4, 2-3	51.0 ±30%	1.90	500	7.2	D	1
HM67-S510	1-4, 2-3	51.0 ±30%	2.80	500	9.4	Е	1
HM67-B471	1-4, 2-3	470.0 ±30%	0.80	500	8.2	F	1
HM67-B102 <sup>(3)</sup>	1-4, 2-3	1000.0 +50%, -30%	0.16	500	9.4	G	1
HM67-B222 <sup>(3)</sup>	1-4, 2-3	2200.0 +50%, -30%	0.16	400	8.2	Н	1
HM67-B472 <sup>(3)</sup>	1-4, 2-3	4700.0 +50%, -30%	0.24	200	9.8	l	1
HM67-10510	1-4, 2-3	51.0 ±30%	2.40	200	403	0510	2

Notes:

- (1) Leakage inductance is measured with pin 2 & 3 shorted.
- (2) DC resistance is measured at 25°C.
- (3) Maximum operating temperature is +85°C.

# Standard: Embossed Tape & Reel Reel: Diameter: Figure 1 & 2 = 13" (330.2mm) Capacity: Figure 1 = 400 Units Figure 2 = 2000 Units







# **Outline Dimensions (Inch/mm)**

Figure 1

Side View

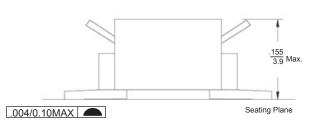
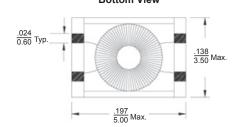
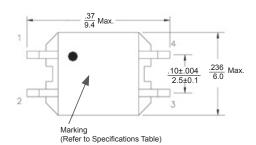


Figure 2

Bottom View

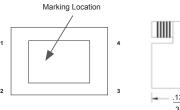


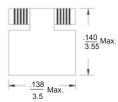
**Top View** 



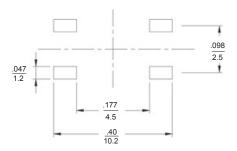
**Top View** 

Side View

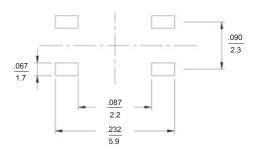




#### **Recommended Solder Pad Layout**



#### Recommended Solder Pad Layout



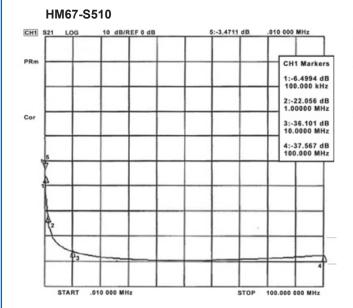




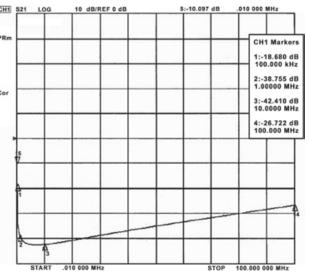
# Electrical Characteristies @ 25°C (A) Attenuation vs. Frequency Graphs HM67-B5R0 HM67-S250 CH1 S21 LOG CH1 S21 5 dB/REF -10.dB CH1 Markers CH1 Markers 1:-4.3297 dB 100.000 kHz 1:-5.4589 dB 100.000 kHz 2:-10.075 dB 1.00000 MHz Cor 3:-19.095 dB 10.0000 MHz 3:-28.451 dB 10.0000 MHz 4:-29.918 dB 100.000 MHz .010 000 MHz START 100,000 000 MHz STOP HM67-B110 HM67-B510 5 dB/REF 0 dB CH1 S21 LOG 5:-3.6395 dB .010 000 MHz PRm CH1 Markers CH1 Markers 1:-4.7546 dB 100.000 kHz 1:-7.2854 dB 100.000 kHz 2:-13.945 dB 1.00000 MHz 2:-18.650 dB 1.00000 MHz Cor 3:-24.151 dB 10.0000 MHz 4:-18.761 dB 100.000 MHz



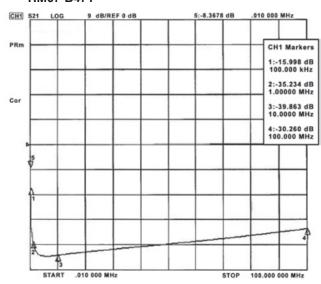
# Electrical Characteristies @ 25°C (Cont'd)



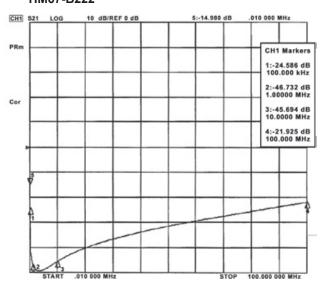




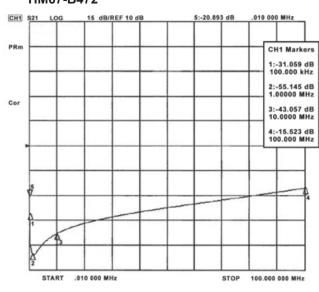
#### HM67-B471



#### HM67-B222



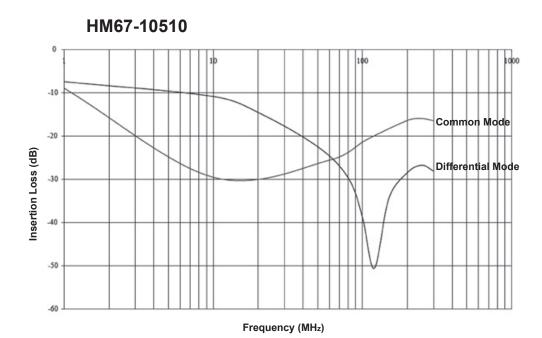
#### HM67-B472





# Electrical Characteristies @ 25°C (Cont'd)

(B) Insertion Loss vs. Frequency Graph



(C) Current Derating Curve

