

Electrical / Environmental

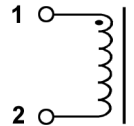
HM56

High Current Low Loss Ferrite Cube Inductors

- Operating Temperature Range -40°C to +125°C
- DCR Tolerance ±5 %
- Operating Frequency Up to 3 MHz



Schematic

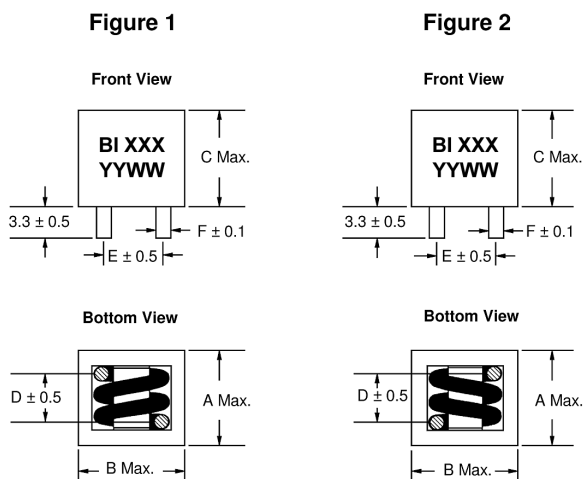


Specifications @ 25°C

| Part Number | Inductance 100 kHz, 0.1 V | | $I_{rated}^{(1)}$ (A dc) | Heating ⁽²⁾ Current (A dc) | $I_{sat}^{(3)}$ (A dc) | DCR (mΩ) ±5% | Dim. D (mm) | Dim. E (mm) | ∅ Leads Dim. F (mm Typ.) | Fig. |
|-----------------|------------------------------|--------------------------|-----------------------------|---------------------------------------------|---------------------------|--------------------|----------------|----------------|--------------------------------|------|
| | @ 0 A dc μH ± 15% | @ I_{rated} μH Typ. | | | | | | | | |
| HM56-10100R15LF | 0.15 | 0.14 | 68 | 39 | 100 | 0.60 | 5.5 | 5.0 | 1.40 | 1 |
| HM56-11120R19LF | 0.19 | 0.18 | 75 | 45 | 100 | 0.55 | 5.0 | 6.0 | 1.45 | 1 |
| HM56-11120R22LF | 0.22 | 0.20 | 60 | 45 | 90 | 0.55 | 5.0 | 6.0 | 1.45 | 1 |
| HM56-11120R36LF | 0.37 | 0.36 | 58 | 37 | 77 | 0.80 | 5.0 | 6.0 | 1.45 | 1 |
| HM56-11120R4LF | 0.40 | 0.39 | 50 | 37 | 73 | 0.80 | 5.0 | 6.0 | 1.45 | 1 |
| HM56-11120R6LF | 0.60 | 0.54 | 30 | 37 | 50 | 0.80 | 5.0 | 6.0 | 1.45 | 1 |
| HM56-11121R0LF | 1.00 | 0.90 | 28 | 23 | 37 | 2.00 | 5.4 | 6.6 | 1.20 | 1 |
| HM56-11121R3LF | 1.30 | 1.25 | 25 | 23 | 35 | 2.00 | 5.4 | 6.6 | 1.20 | 1 |
| HM56-11121R5LF | 1.50 | 1.45 | 24 | 17 | 30 | 3.65 | 6.0 | 7.0 | 0.90 | 1 |
| HM56-11122R0LF | 2.00 | 1.90 | 20 | 17 | 27 | 3.65 | 5.7 | 6.9 | 0.90 | 1 |
| HM56-11123R0LF | 3.00 | 2.80 | 18 | 12 | 22 | 7.50 | 6.0 | 7.0 | 0.72 | 1 |
| HM56-13131R2LF | 1.20 | 1.00 | 20 | 34 | 35 | 1.30 | 7.5 | 7.5 | 1.45 | 2 |
| HM56-14138R0LF | 8.00 | 7.00 | 3.5 | 16 | 7 | 6.30 | 9.0 | 8.0 | 0.90 | 2 |

- Notes: (1) The rated current, I_{rated} , is the approximate DC current at which inductance will be decreased by 5% typical from its initial (zero DC) value.
 (2) The heating current is the DC current which causes the component temperature to increase by approximately 40°C.
 (3) I_{sat} is the saturation current at which inductance rolls off approximately 30% from its initial (zero DC) value.

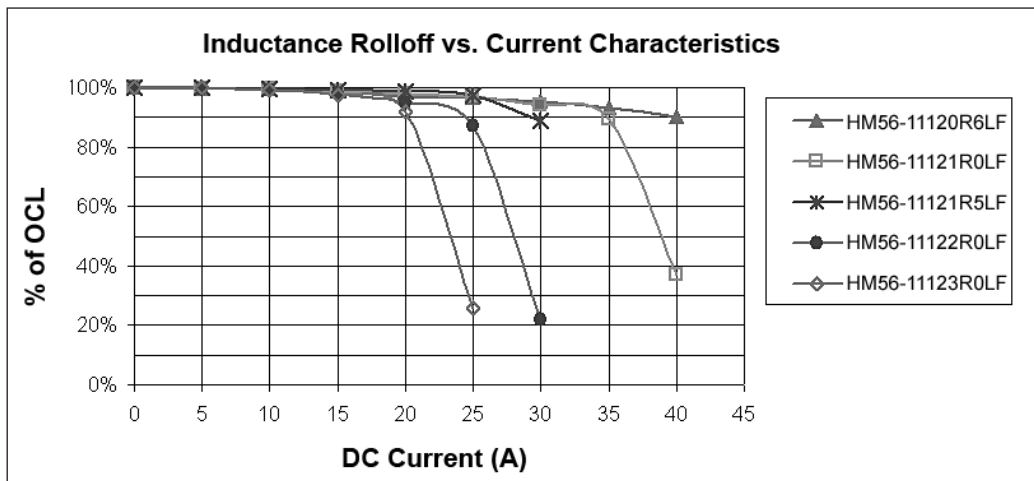
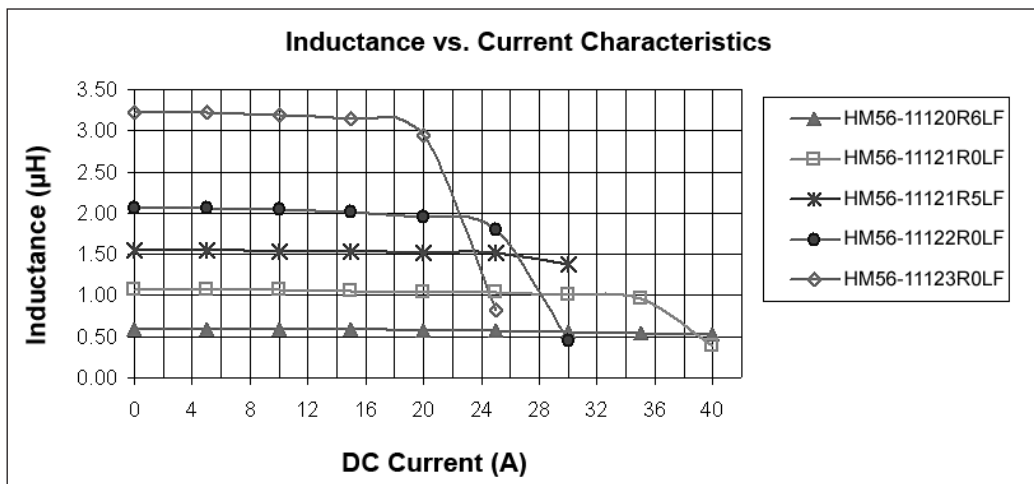
Outline Dimensions (mm)



| Case Size | Figure | A | B | C |
|-----------|--------|------|------|------|
| 1010 | 1 | 10.0 | 10.0 | 10.0 |
| 1112 | 1 | 11.0 | 11.7 | 10.0 |
| 1313 | 2 | 13.0 | 13.0 | 9.5 |
| 1413 | 2 | 14.0 | 13.0 | 9.5 |

Note: Refer to Specifications table for 'D', 'E' & 'F' dimensions of each model.

Electrical Characteristics @ 25°C



Packaging

Standard: Tray

| | | |
|---------------------|---|-----------|
| Quantity Per Tray | = | 50 Units |
| Quantity Per Carton | = | 650 Units |

Ordering Information

