

Shielded Surface Mount Coupled Inductors

MODELS HA78D-128XXXXLF

- Operating Temperature Range -50°C to +155°C
- Temperature Rise, Maximum 40°C
- Operating Frequency Up to 3MHz
- AEC-Q200 CERTIFIED
- RoHS Compliant



Electrical Schematic & Derating Curve



Specifications @ 25°C

| Part Number | Parallel Connection | | | | Series Connection | | | |
|-----------------|--------------------------|-------------------------------|--|--|--------------------------|-------------------------------|--|--|
| | L ⁽¹⁾ (μH) | DCR Max ⁽²⁾ (Ω) | I _{sat} ⁽³⁾ (A) | I _{rms} ⁽⁴⁾ (A) | L ⁽¹⁾ (μH) | DCR Max ⁽²⁾ (Ω) | I _{sat} ⁽³⁾ (A) | I _{rms} ⁽⁴⁾ (A) |
| HA78D-1284R7MLF | 4.7 ± 20% | 0.019 | 14.90 | 7.40 | 18.8 ± 25% | 0.076 | 7.70 | 3.60 |
| HA78D-1285R6MLF | 5.6 ± 20% | 0.023 | 13.40 | 7.20 | 22.4 ± 25% | 0.092 | 6.60 | 3.50 |
| HA78D-1286R8MLF | 6.8 ± 20% | 0.024 | 13.10 | 6.90 | 27.2 ± 25% | 0.096 | 6.40 | 3.40 |
| HA78D-1288R2MLF | 8.2 ± 20% | 0.025 | 10.80 | 6.60 | 32.8 ± 25% | 0.100 | 5.60 | 3.30 |
| HA78D-128100MLF | 10 ± 20% | 0.029 | 10.50 | 6.20 | 40 ± 25% | 0.116 | 5.40 | 3.20 |
| HA78D-128120MLF | 12 ± 20% | 0.031 | 9.60 | 6.00 | 48 ± 25% | 0.124 | 4.80 | 2.90 |
| HA78D-128150MLF | 15 ± 20% | 0.036 | 9.10 | 5.80 | 60 ± 25% | 0.144 | 4.30 | 2.70 |
| HA78D-128180MLF | 18 ± 20% | 0.040 | 8.00 | 5.50 | 72 ± 25% | 0.158 | 3.90 | 2.50 |
| HA78D-128220MLF | 22 ± 20% | 0.048 | 6.80 | 5.20 | 88 ± 25% | 0.190 | 3.50 | 2.20 |
| HA78D-128270MLF | 27 ± 20% | 0.060 | 6.50 | 4.70 | 108 ± 25% | 0.240 | 3.40 | 2.00 |
| HA78D-128330MLF | 33 ± 20% | 0.075 | 5.60 | 4.20 | 132 ± 25% | 0.300 | 3.10 | 1.70 |
| HA78D-128390MLF | 39 ± 20% | 0.080 | 5.50 | 3.60 | 156 ± 25% | 0.320 | 2.80 | 1.60 |
| HA78D-128470MLF | 47 ± 20% | 0.090 | 5.20 | 3.00 | 188 ± 25% | 0.360 | 2.60 | 1.50 |
| HA78D-128560MLF | 56 ± 20% | 0.095 | 4.50 | 2.80 | 224 ± 25% | 0.380 | 2.40 | 1.40 |
| HA78D-128680MLF | 68 ± 20% | 0.105 | 4.10 | 2.60 | 272 ± 25% | 0.420 | 2.10 | 1.30 |
| HA78D-128820MLF | 82 ± 20% | 0.140 | 3.80 | 2.30 | 328 ± 25% | 0.560 | 1.90 | 1.20 |
| HA78D-128101MLF | 100 ± 20% | 0.150 | 3.40 | 2.00 | 400 ± 25% | 0.600 | 1.70 | 1.10 |
| HA78D-128121KLF | 120 ± 10% | 0.205 | 3.20 | 1.90 | 480 ± 25% | 0.820 | 1.60 | 1.00 |
| HA78D-128151KLF | 150 ± 10% | 0.230 | 2.80 | 1.80 | 600 ± 25% | 0.920 | 1.40 | 0.89 |
| HA78D-128181KLF | 180 ± 10% | 0.255 | 2.50 | 1.70 | 720 ± 25% | 1.02 | 1.30 | 0.84 |
| HA78D-128221KLF | 220 ± 10% | 0.345 | 2.30 | 1.60 | 880 ± 25% | 1.38 | 1.10 | 0.75 |
| HA78D-128271KLF | 270 ± 10% | 0.450 | 2.10 | 1.50 | 1080 ± 25% | 1.80 | 1.00 | 0.71 |
| HA78D-128331KLF | 330 ± 10% | 0.510 | 1.90 | 1.30 | 1320 ± 25% | 2.04 | 0.92 | 0.62 |
| HA78D-128391KLF | 390 ± 10% | 0.560 | 1.70 | 1.10 | 1560 ± 25% | 2.24 | 0.84 | 0.53 |
| HA78D-128471KLF | 470 ± 10% | 0.765 | 1.60 | 0.87 | 1880 ± 25% | 3.06 | 0.80 | 0.43 |
| HA78D-128561KLF | 560 ± 10% | 0.845 | 1.50 | 0.83 | 2240 ± 25% | 3.38 | 0.73 | 0.40 |
| HA78D-128681KLF | 680 ± 10% | 1.145 | 1.30 | 0.76 | 2720 ± 25% | 4.58 | 0.63 | 0.36 |
| HA78D-128821KLF | 820 ± 10% | 1.275 | 1.20 | 0.69 | 4000 ± 30% | 5.10 | 0.58 | 0.33 |
| HA78D-128102KLF | 1000 ± 10% | 1.415 | 1.10 | 0.60 | 4800 ± 30% | 5.66 | 0.56 | 0.30 |

General Note

TT Electronics reserves the right to make changes in product specification without notice or liability. All information is subject to TT Electronics' own data and is considered accurate at time of going to print.

Shielded Surface Mount Coupled Inductors



MODELS HA78D-128XXXXLF

- Notes: (1) Inductance is measured at 100 kHz, 0.1Vrms without DC current.
 (2) DCR for 128 series is of Max. value.
 (3) I_{sat} is the saturation current at which inductance rolls off approximately 30% from its initial (zero DC) value.
 (4) I_{rms} is the approximate current at which $\Delta T = 40^{\circ}C$.

Outline Dimensions (mm)



Packaging

| | | | |
|-----------|------------------------|-------------------------|-----------------|
| Standard: | Embossed Tape and Reel | | |
| | Reel: | Diameter: | = 13" (330.2mm) |
| | | Capacity: Case size 128 | = 500 Units |

Ordering Information



General Note

TT Electronics reserves the right to make changes in product specification without notice or liability. All information is subject to TT Electronics' own data and is considered accurate at time of going to print.