

COUPLED INDUCTORS, COMMON MODE CHOKES SDRH1048D SERIES



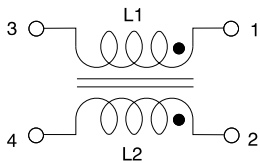
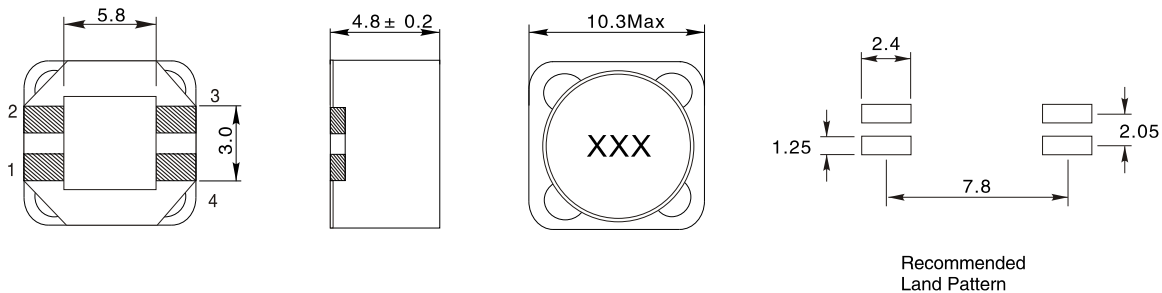
FEATURES:

- Only 4.8 mm high and 10.3 mm square
- AEC-Q200 Grade 1 (-40°C to +125°C)
- Ideal for use in both power line and signal line applications
- Common- and differential-mode filtering in a single device
- Up to 200 MHz differential mode cutoff frequency
- Can be used as coupled inductors for SEPIC applications
- RoHS compliant

ELECTRICAL CHARACTERISTICS:

| Partnumber | Common mode impedance Max (KΩ) | Cutoff frequency (MHz) | Inductance (μH) | | DCR max (Ω) | Isolation (Vrms) | I _{rms} (A) |
|----------------|--------------------------------|------------------------|-----------------|-----|-------------|------------------|----------------------|
| | | | Min | Nom | | | |
| SDRH1048D-2R2N | 3.49@71 MHz | 200 | 1.54 | 2.2 | 0.019 | 200 | 2.4 |
| SDRH1048D-100M | 10.1@27 MHz | 97 | 8.00 | 10 | 0.053 | 200 | 1.5 |
| SDRH1048D-220M | 17.0@17 MHz | 44 | 17.6 | 22 | 0.098 | 200 | 1.3 |
| SDRH1048D-470M | 32.4 @12 MHz | 29 | 37.6 | 47 | 0.208 | 200 | 1.1 |
| SDRH1048D-680M | 52.2 @9.3 MHz | 38 | 54.4 | 68 | 0.297 | 200 | 1.0 |
| SDRH1048D-101M | 58.3 @7.4 MHz | 19 | 80.0 | 100 | 0.387 | 200 | 0.85 |
| SDRH1048D-221K | 87.9 @5.0 MHz | 16 | 198 | 220 | 0.840 | 200 | 0.62 |

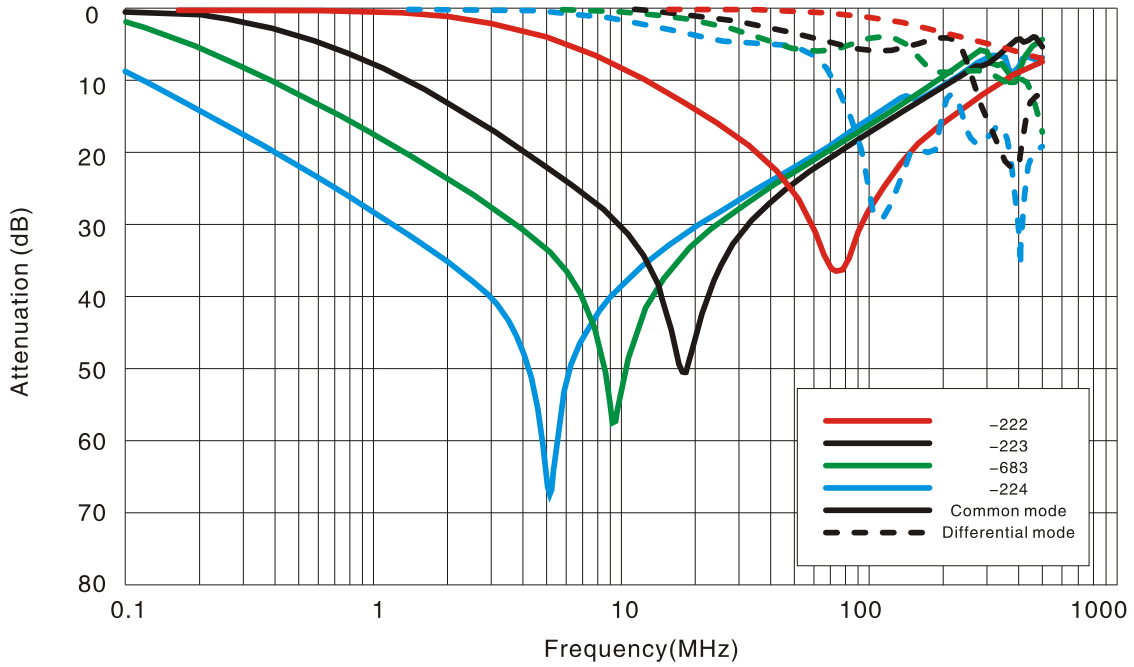
PHYSICAL CHARACTERISTICS & WINDING:



1. Frequency at which the differential mode attenuation equals -3dB
2. Inductance shown for each winding, measured at 100 kHz, 0.1 Vrms, 0 Adc on an Agilent/HP 4284A LCR meter or equivalent
3. DCR is for each winding.
4. Winding-to-winding isolation 500 Vrms, one minute
5. Current that causes a 40 °C temperature rise from 25 °C ambient. This information is for reference only and does not represent absolute maximum ratings
6. Electrical specifications at 25 °C
7. Ambient temperature -40 °C to +85 °C with I_{rms} current. Maximum part temperature +125 °C (ambient + temp rise).
8. Storage temperature Component: -40 °C to +125 °C .
9. Tape and reel packaging: -40 °C to +80 °C

PERFORMANCE CURVE:

TYPICAL ATTENUATION (REF: 50 OHMS)



TYPICAL IMPEDANCE VS FREQUENCY

