

Features

- Lead free
- RoHS compliant*
- 8 T-filters with common ground
- Stable thin-film-on-silicon technology
- Ultra-miniature packages to JEDEC standards

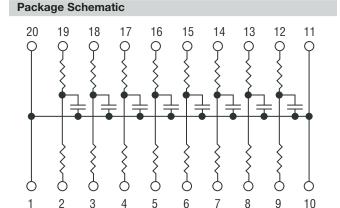
Applications

- Bidirectional EMI/RFI filtering on bus lines
- High frequency applications
- Ideal for space-constrained applications

Thin Film on Silicon 2CFB T-Filter

General Information

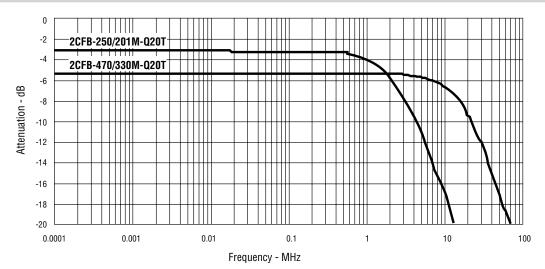
T-Filters are typically used for bidirectional filtering of EMI and RFI on high speed data lines connecting computer with peripheral. These Silicon-based, Tantalum-Nitride resistors and capacitors feature excellent stability, temperature coefficients and tracking performance. This product series conforms to JEDEC standards.



Electrical & Environmental Characteristics

| Electrical Characteristics | Symbol | Minimum | Nominal | Maximum | Unit |
|-----------------------------------|------------------|---------|---------|---------|------|
| Resistance Range | R | 10 | | 100 | Ω |
| Resistor Tolerance | | | ±10 % | | Ω |
| Power Rating per Resistor @ 70 °C | | | | 0.1 | Watt |
| Capacitor Range | С | 15 | | 250 | pF |
| Capacitor Tolerance | | | ±20 % | | pF |
| Capacitor Breakdown Voltage | | 25 | 35 | | V |
| Operating Voltage | | | | 50 | V |
| Environmental Characteristics ESD | | 2 K | | | V |
| Operating Temperature | TJ | -55 | | +125 | °C |
| Storage Temperature | T _{stg} | -65 | | +150 | °C |
| Power Rating per Package @ 70 °C | | | | 1.0 | Watt |

Filter Response

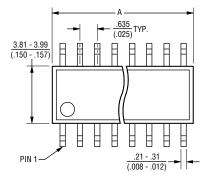


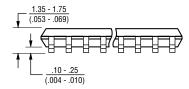
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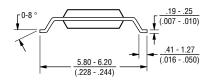
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Mechanical Characteristics

QSOP Package Dimensions





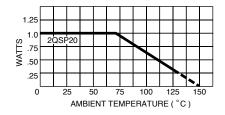


| Model | Α | | | |
|--------|-----------------------|--|--|--|
| 2QSP20 | 8.56 - 8.74 (.337344) | | | |

Governing dimensions are in mm. Dimensions in parentheses are in inches and are approximate.

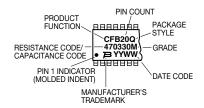
JEDEC Reference Number MO-137.

QSOP Package Power Temperature Derating Curve



Typical Part Marking

Represents total content. Layout may vary.



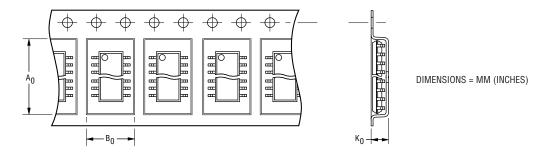
Standard RC Values

| R1 Value (ohms) | C1 Value (pF) | Cap. BV (typ.) | Part Number (Tape & Reel) | Part Number (Tubes) |
|-----------------------|---------------------|----------------------|------------------------------|------------------------|
| 25 | 200 | 25 | 2CFB-250/201M-Q20R | 2CFB-250/201M-Q20T |
| 47 | 33 | 25 | 2CFB-470/330M-Q20R | 2CFB-470/330M-Q20T |
| 100 | 100 | 25 | 2CFB-101/101M-Q20R | 2CFB-101/101M-Q20T |

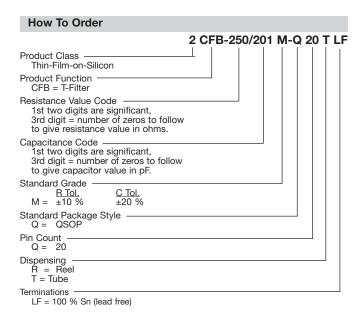
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Dispensing

For large quantities, the product will be dispensed in Tape and Reel (see diagram below).



| Package | Α ₀ | В ₀ | К ₀ | Width | Pitch | No. of Pieces per 13 reel | No. of Pieces per tube |
|----------------|----------------|----------------|----------------|------------|-----------|------------------------------|------------------------|
| QSOP 20 Pin | 6.5 (0.256) | 9.0 (0.354) | 2.1 (0.083) | 16 (0.630) | 8 (0.315) | 3,500 | 56 |





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