

Features

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

Applications

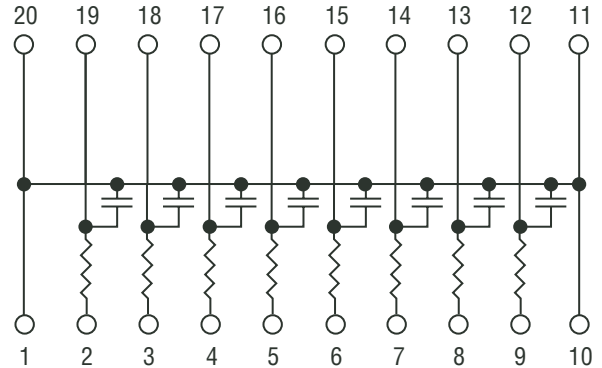
- EMI/RFI filtering on bus lines
- High frequency applications
- Ideal for space-constrained applications

Thin Film on Silicon 2CFA Tapped RC Filter

General Information

Tapped Filters are typically used for filtering 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.

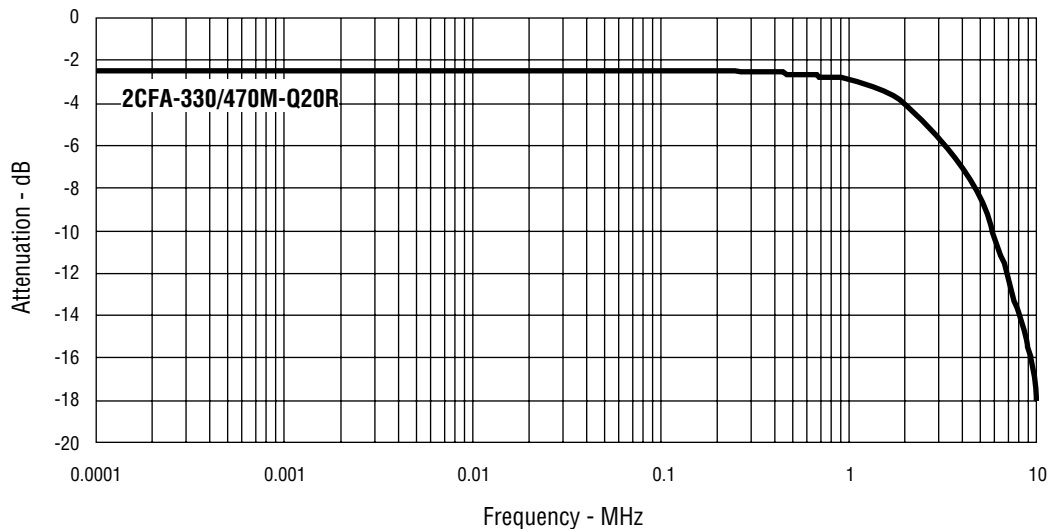
Package Schematic



Electrical & Environmental Characteristics

| Electrical Characteristics | Symbol | Minimum | Nominal | Maximum | Unit |
|--------------------------------------|-----------|---------|------------|---------|--------------------|
| Resistance Range | R | 10 | | 470 | Ω |
| Resistor Tolerance | | | $\pm 10\%$ | | Ω |
| Power Rating per Resistor @ 70 °C | | | | 0.1 | Watt |
| Capacitor Range | C | 15 | | 220 | pF |
| Capacitor Tolerance | | | $\pm 20\%$ | | pF |
| Capacitor Breakdown Voltage | | 25 | 35 | | V |
| Operating Voltage | | | | 50 | V |
| Environmental Characteristics | | | | | |
| ESD | | 2 K | | | V |
| Operating Temperature | T_J | -55 | | +125 | $^{\circ}\text{C}$ |
| Storage Temperature | T_{stg} | -65 | | +150 | $^{\circ}\text{C}$ |
| Power Rating per Package @ 70 °C | | | | 1.0 | Watt |

Frequency Response



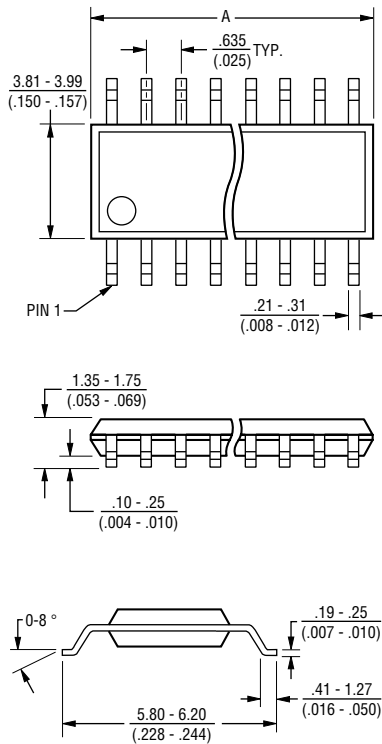
*RoHS Directive 2002/95/EC Jan 27 2003 including Annex
 Specifications are subject to change without notice.
 Customers should verify actual device performance in their specific applications.

Thin Film on Silicon 2CFA Tapped RC Filter

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Mechanical Characteristics

QSOP Package Dimensions

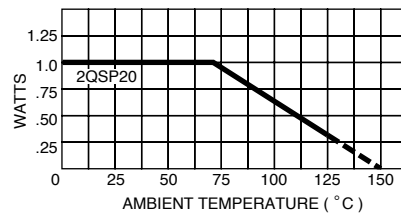


| Model | A |
|--------|---------------------------|
| 2QSP20 | 8.56 - 8.74 (.337 - .344) |

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

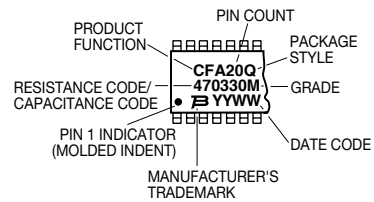
JEDEC Reference Number MO-137.

QSOP Package Power Temperature Derating Curve



Typical Part Marking

Represents total content. Layout may vary.



Standard RC Values

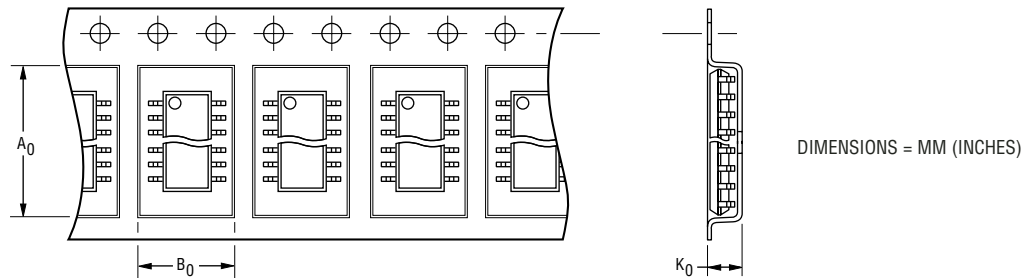
| R1 Value (ohms) | C1 Value (pF) | Cap. BV (typ.) | Part Number (Tape & Reel) | Part Number (Tubes) |
|-----------------|---------------|----------------|---------------------------|---------------------|
| 33 | 47 | 75 | 2CFA-330/470M-Q20R | 2CFA-330/470M-Q20T |

Thin Film on Silicon 2CFA Tapped RC Filter



Dispensing

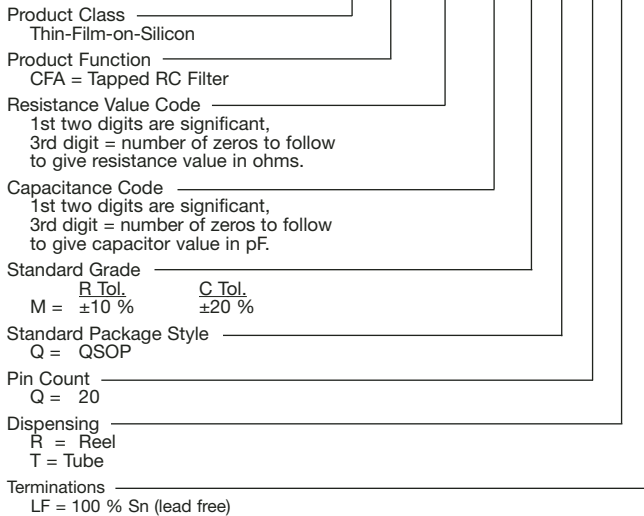
For large quantities, the product will be dispensed in Tape and Reel (see diagram below).



| Package | A ₀ | B ₀ | K 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 |

How To Order

2 CFA-330/470 M-Q 20 T LF



Reliable Electronic Solutions

Asia-Pacific:

Tel: +886-2 2562-4117 • Fax: +886-2 2562-4116

Europe:

Tel: +41-41 768 5555 • Fax: +41-41 768 5510

The Americas:

Tel: +1-951 781-5500 • Fax: +1-951 781-5700

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