

Features

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

Applications

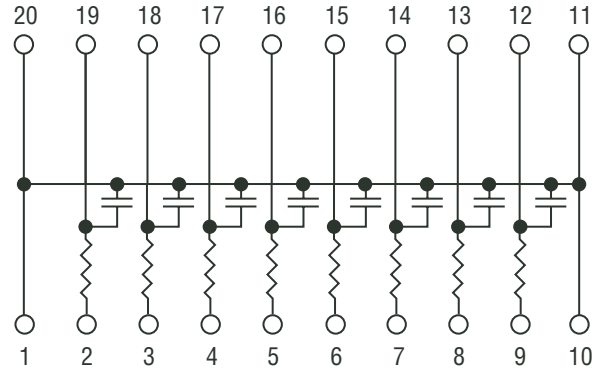
- EMI/RFI filtering on bus lines
- High frequency applications
- Ideal for space-constrained applications

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.

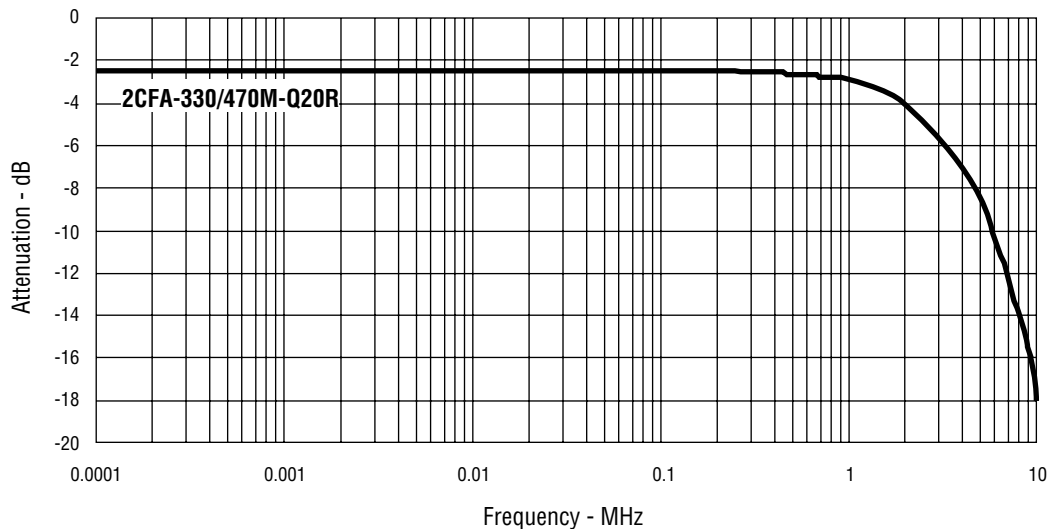
Package Schematic



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



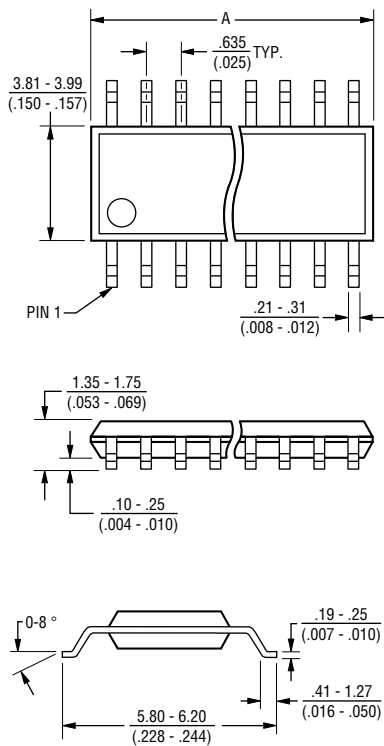
*RoHS Directive 2002/95/EC Jan 27 2003 including Annex
 Specifications are subject to change without notice.
 Customers should verify actual device performance in their specific applications.

Thin Film on Silicon 2CFA Tapped RC Filter

BOURNS®

Mechanical Characteristics

QSOP Package Dimensions

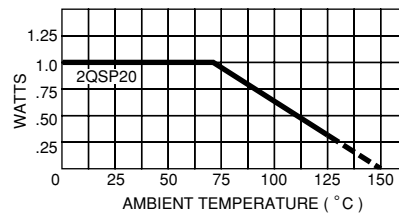


Model	A
2QSP20	8.56 - 8.74 (.337 - .344)

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

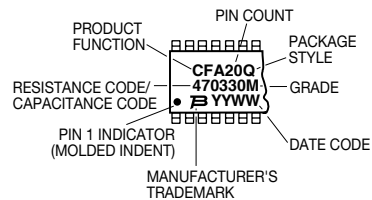
JEDEC Reference Number MO-137.

QSOP Package Power Temperature Derating Curve



Typical Part Marking

Represents total content. Layout may vary.



Standard RC Values

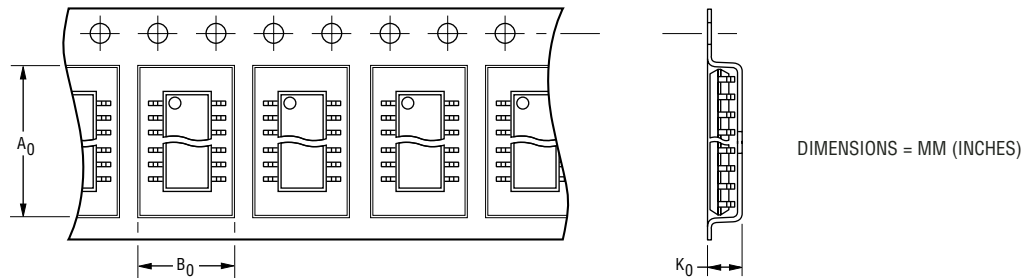
R1 Value (ohms)	C1 Value (pF)	Cap. BV (typ.)	Part Number (Tape & Reel)	Part Number (Tubes)
33	47	75	2CFA-330/470M-Q20R	2CFA-330/470M-Q20T

Thin Film on Silicon 2CFA Tapped RC Filter

BOURNS®

Dispensing

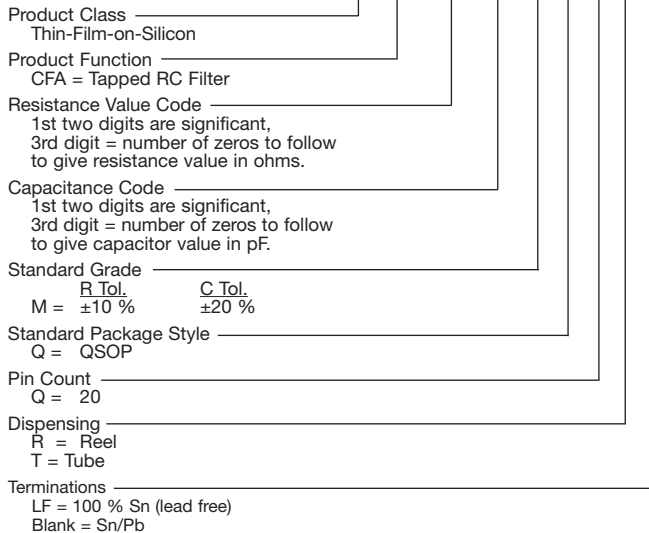
For large quantities, the product will be dispensed in Tape and Reel (see diagram below).



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



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

www.bourns.com