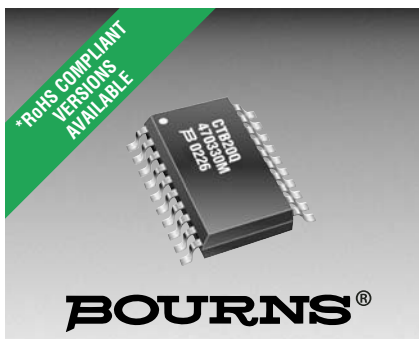




Features

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

Applications

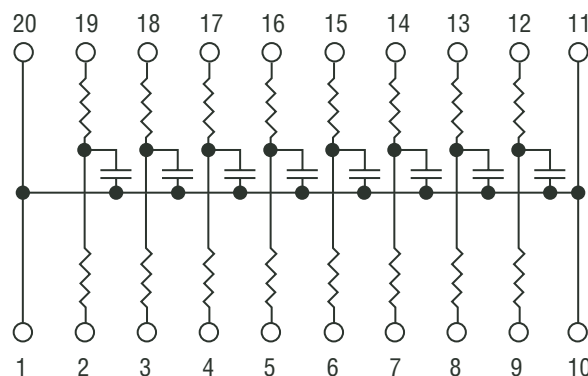
- Bi-directional EMI/RFI filtering on bus lines
- High frequency applications
- Ideal for space-constrained applications

Thin Film on Silicon 2CFB T-Filter

General Information

T-Filters are typically used for Bi-Directional 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.

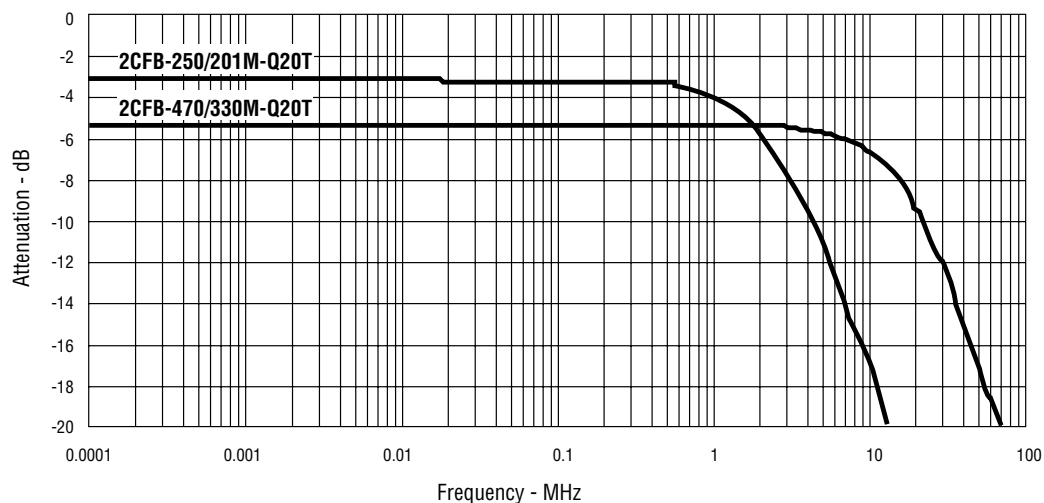
Package Schematic



Electrical & Environmental Characteristics

Electrical Characteristics	Symbol	Minimum	Nominal	Maximum	Unit
Resistance Range	R	10		100	Ω
Resistor Tolerance			$\pm 10\%$		Ω
Power Rating per Resistor @ 70 °C				0.1	Watt
Capacitor Range	C	15		250	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	°C
Storage Temperature	T_{stg}	-65		+150	°C
Power Rating per Package @ 70 °C				1.0	Watt

Filter Response



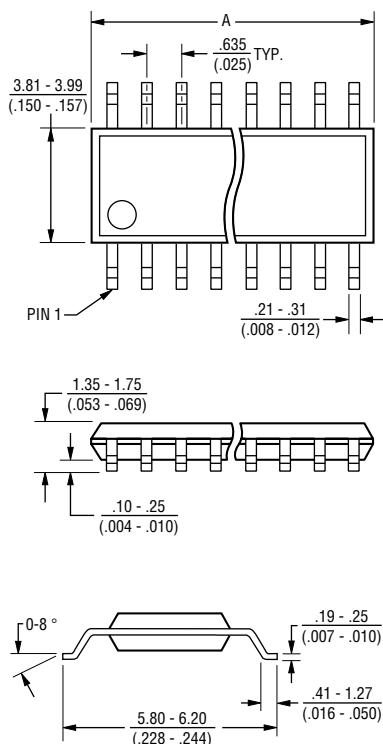
*RoHS Directive 2002/95/EC Jan 27 2003 including Annex
Specifications are subject to change without notice.
Customers should verify actual device performance in their specific applications.

Thin Film on Silicon 2CFB T-Filter

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Mechanical Characteristics

QSOP Package Dimensions

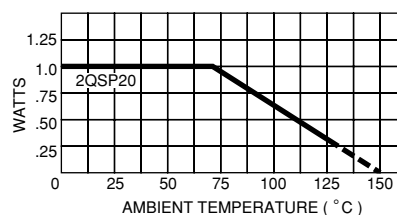


Model	A
2QSP20	8.56 - 8.74 (.337 - .344)

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

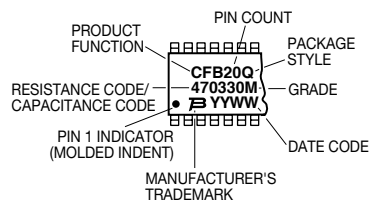
JEDEC Reference Number MO-137.

QSOP Package Power Temperature Derating Curve



Typical Part Marking

Represents total content. Layout may vary.



Standard RC Values

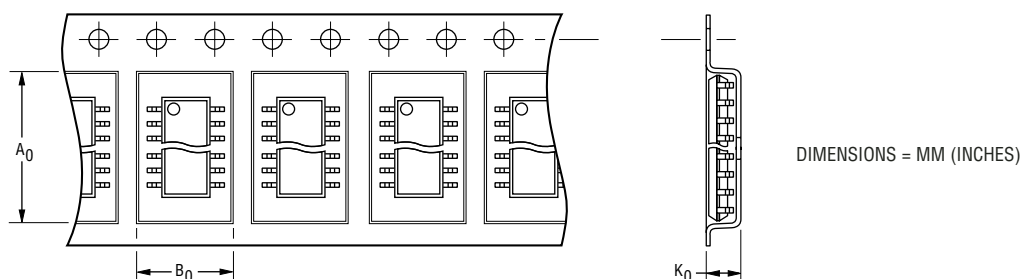
R1 Value (ohms)	C1 Value (pF)	Cap. BV (typ.)	Part Number (Tape & Reel)	Part Number (Tubes)
25	200	25	2CFB-250/201M-Q20R	2CFB-250/201M-Q20T
47	33	25	2CFB-470/330M-Q20R	2CFB-470/330M-Q20T
100	100	25	2CFB-101/101M-Q20R	2CFB-101/101M-Q20T

Thin Film on Silicon 2CFB T-Filter

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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 CFB-250/201 M-Q 20 T

Product Class _____
Thin-Film-on-Silicon

Product Function _____
CFB = T-Filter

Resistance Value Code _____
1st two digits are significant,
3rd digit = number of zeros to follow
to give resistance value in ohms.

Capacitance Code _____
1st two digits are significant,
3rd digit = number of zeros to follow
to give capacitor value in pF.

Standard Grade _____
M = $\pm 10\%$ $\frac{R}{Tol.}$ $\frac{C}{Tol.}$ $\pm 20\%$

Standard Package Style _____
Q = QSOP

Pin Count _____
Q = 20

Dispensing _____
R = Reel
T = Tube

Terminations _____
LF = 100 % Sn (lead free)
Blank = Sn/Pb



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