

T Filter networks are used for suppression of EMI/RFI at low and high frequencies. The T filter's symmetric design is useful for filtering bi-directional signals. KOA's T Filter networks offer exceptional filtering capabilities at both low and high frequencies, as well as exhibiting superior characteristics of advanced thin film processing. This is of particular significance in today's high speed/high frequency applications using advanced digital technology and the overall increased use of RF products. A standard 8-filter channel network replaces expensive and bulky discrete devices, saving real estate, increasing board yields, increasing reliability and reducing overall manufacturing costs.

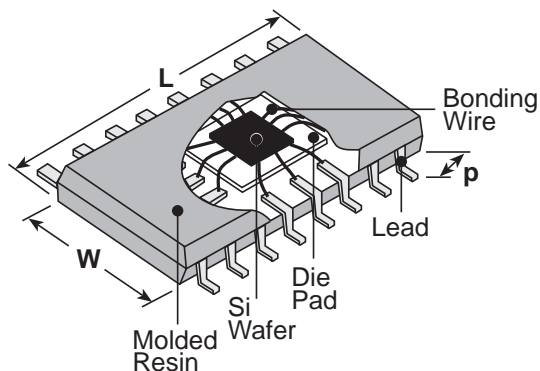
### applications

- EMI/RFI filter
- Low pass filter
- High frequency/  
high speed applications

### features

- Thin film RC network
- Excellent stability and performance
- Low parasitic inductance
- Replaces 24 discrete components
- Saves valuable real estate
- Total components cost advantage

### dimensions and construction



Size Code	Dimensions inches (mm)		
	L	W	p
Q20	.341 (8.66)	.150 (3.81)	.058 (1.47)
W20	.450 (12.70)	.300 (7.62)	.025 (0.64)

### ordering information

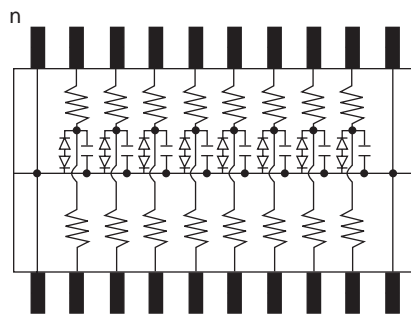
New Part #	TFB	Q20	L	TEB	500K	101M
Type	TFB	Package Symbol	Termination Material	Packaging	Nominal Resistance & Tolerance	Nominal Capacitance & Tolerance
		Package type symbol + number of pins QSOP: Q20 SOIC Wide: W20	L: SnPb	TEB: 13" embossed plastic tape	3 significant digits + number of zeros followed by tolerance K: ±10%	3 significant digits + number of zeros followed by tolerance M: ±20%

For further information on packaging, please refer to Appendix C.

Specifications given herein may be changed at any time without prior notice. Please confirm technical specifications before you order and/or use.

11/01/03

## circuit schematic



1  
n = number of pins (20)

## applications and ratings

Part Designation	Power Rating @ 70°C (Per Element)	T.C.R. (ppm/°C)	Capacitor Voltage Rating	Operating Temperature Range
TFB	50mW	±200	20V	-55°C to +150°C

## electrical characteristics

Part Designation	Resistance Range Ω (E-24)	Resistance Tolerance	Capacitor Range pF (E-24)	Capacitor Tolerance
TFB	10 ~ 1k	K: ±10%	22 ~ 250pF	M: ±20%

## environmental applications

### Performance Characteristics

Parameter	Maximum Δ R	Test Method
Resistance to Soldering Heat	+0.25%	MIL-R-55342 4.7.7
Short Time Overload	+0.50%	MIL-R-55342 4.7.5
Moisture Resistance	+0.50%	MIL-STD-202 method 103
Thermal Shock	+0.50%	MIL-STD-202 method 107
H.A.S.T.	+1%	2 Atm., 121°C, 96 hrs