

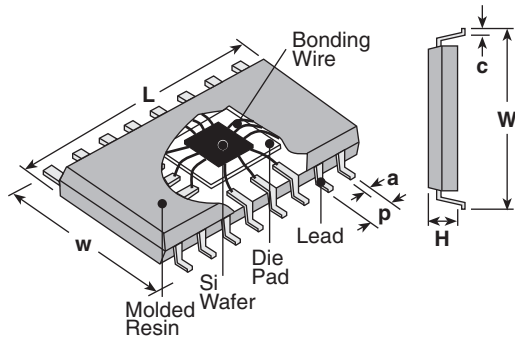
### features

- Thin film construction
- Surface mount package
- Stable resistor technology
- High component density
- Products with lead-free terminations meet EU RoHS and China RoHS requirements

### applications

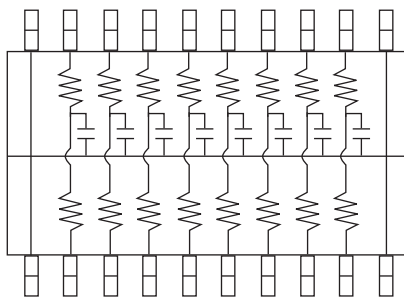
- Signal termination
- Signal conditioning
- Low pass filter
- T filter

### dimensions and construction

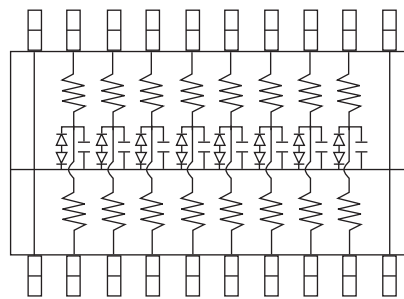


Package Code	Total Power	Pins	Dimensions inches (mm)						
			L ±0.2	W ±0.2	w ±0.2	H ±0.2	p ±0.1	a ±0.1	c ±0.1
Q20	1 watt	20	.341 (8.66)	.236 (5.99)	.150 (3.81)	.063 (1.60)	.025 (0.635)	.010 (0.25)	.026 (0.66)
Q24	1 watt	24	.341 (8.66)	.236 (5.99)	.150 (3.81)	.063 (1.60)	.025 (0.635)	.010 (0.25)	.026 (0.66)

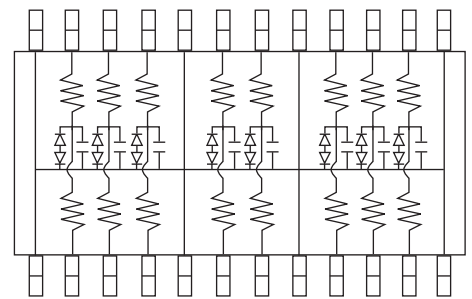
### circuit schematic



TFA: 20 pins



TFB: 20 pins



TFB: 24 pins

### ordering information

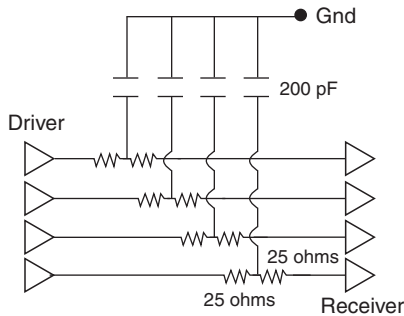
New Part #	TFB	Q20	T	TEB	250	K	/	201	M
Type	TFA TFB	Package Code Reference above table	Termination Material T: Sn (Other termination styles available, contact factory for options)	Packaging TEB: 13" embossed plastic tape	Nominal Resistance 2 significant digits + number of zeros	Tolerance K: ±10%		Nominal Capacitance 2 significant digits + number of zeros	Tolerance M: ±20%

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

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

11/20/08

## Parallel Termination



## applications and ratings

Part Designation	Power Rating @ 70°C (Per Element)	T.C.R. (ppm/°C)	Capacitor Voltage Rating	Operating Temperature Range	Resistance Range Ω (E-24)	Resistance Tolerance	Capacitor Range pF (E-24)	Capacitor Tolerance	ESD* Rating IEC 61000-4-2	Diode* Breakdown Voltage (@1ma)
TFA TFB	100mW	±200	20V	-55°C to +155°C	10 ~ 1,000	K: ±10%	33 ~ 400pF	M: ±20%	8kV*	6.5v Min.

\* TFB only

## 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