

TFB SERIES

Enhanced T Filter Network

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.

Features

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

Applications

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

Electrical Characteristics

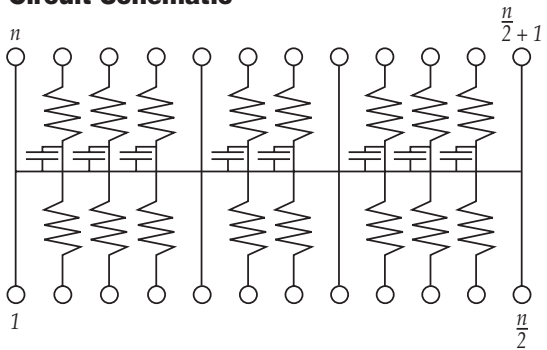
Resistance Range 10Ω to 10KΩ
 Capacitance Range 10pF to 220pF
 Resistance Tolerance . . . ±5%, ±10%, ±20%
 Capacitance Tolerance . . . ±10%, ±20%
 T.C.R. 250 ppm/°C

Operating
 Temperature Range -55°C to +125°C

Storage
 Temperature Range -65°C to +150°C

Power Rating
 @ 70°C 100mW per resistor

Circuit Schematic



Available Pin Configurations

n = Number of Pins (24)
 See physical configurations on page E-11 for available pin/package configurations.

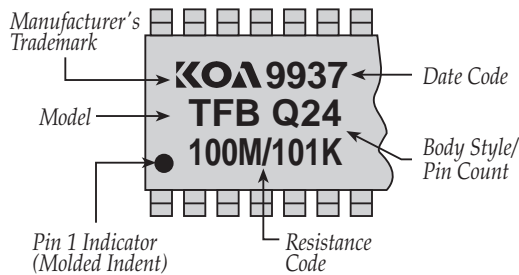
Physical Configurations

Body Style	Resistor/Capacitor Pin Count
Wide SOIC	24
QSOP	24
TSSOP	24
Die Pack *	24

Standard Resistance/Capacitance Values

Resistance (ohms)	Capacitance (pF)	Code
10	100	100/101
15	47	150/470
25	50	250/500
25	100	250/101
25	200	250/201
47	33	470/330
100	100	101/101

Part Marking



Mechanical Characteristics

Item	Material
Substrate	Silicon
Resistor material	TaN/NiCr
Dielectric	Silicon dioxide/Nitride

* See page J-6 for Die Pack specifications.

Ordering Information

TFB	Q	24	B	100M/101K
Circuit Type	Body Style	Number of Pins	Packaging	Resistance/Capacitance Value
TFB-Enhanced T Filter Network	W = Wide SOIC Q = QSOP T = TSSOP 6 = 0.6 mm Die Pack 5 = 0.5 mm Die Pack 4 = 0.4 mm Die Pack	24 See above table	B = 13" Embossed Plastic Tape & Reel, see Packaging Section for details	2 significant digits + the number of zeros followed by the tolerance J = $\pm 5\%$ K = $\pm 10\%$ M = $\pm 20\%$