

Thick Film Resistor Networks



R Series

(Single-in-Line, Low Profile)

MERITEK

Feature

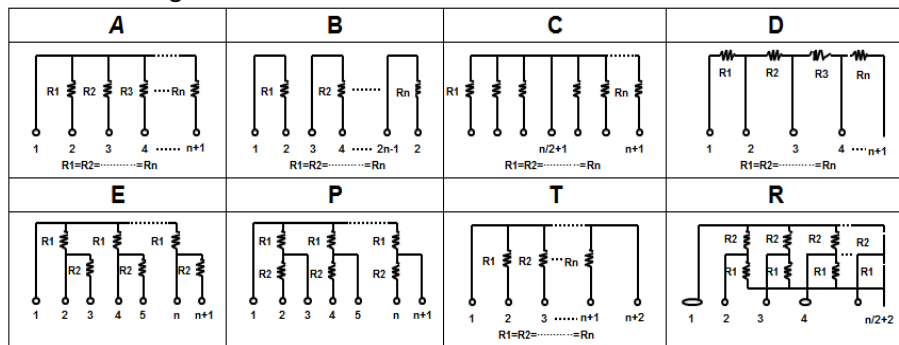
- Wide resistance range: 2291 to 1M Ω (1 O Ω - 3.3 M Ω available)
- Miniature package with maximum sealed heights 0.2"(5.08mm)
- Highly stable thick film products
- Products protected by tough epoxy conformal coating
- Reduces total assembly cost
- Mixed value resistances available



PART NUMBERING SYSTEM

Meritek Series

Circuit Configurations



Element No.

2 – 20

Resistance Value

The first two digits are significant figures

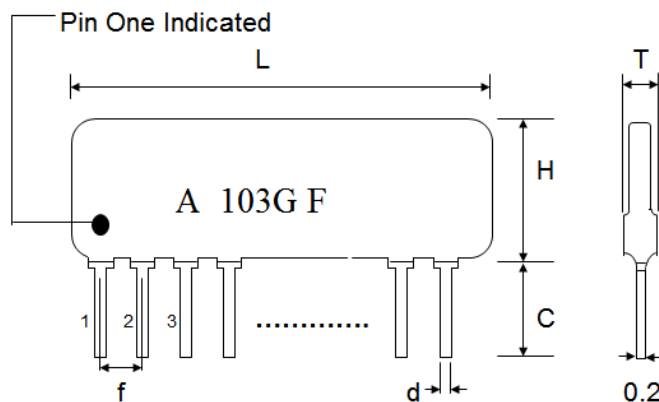
Of resistance value and the third denotes the number of zeros following

CODE	331	472	223	104
Value	330 Ω	4.7K Ω	22K Ω	100K Ω

Resistance Tolerance

CODE	F	G	J
Tolerance	$\pm 1\%$	$\pm 2\%$	$\pm 5\%$

Construction and Dimension



ORDER TYPE:

STYLE:	9
L (MAX)	22.9
H (MAX)	5.08
T (MAX)	2.5
C +0.3/-0.2	2.8
d ± 0.05	0.5
f $\pm$	2.54

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Item	Requirement	Test Methods
Resistance to soldering heat	$\Delta R \leq \pm (0.5\% + 0.05\Omega)$	With $350 \pm 5^\circ\text{C}$, for 3 seconds
Solderability	Over 95% of termination must be covered with new solder.	After immersing flus, dip in the 260°C Max. solder bath for 3 ± 0.5 sec.
Terminal Strength (Tensile Strength)	$\Delta R \leq \pm (0.5\% + 0.05\Omega)$ No mechanical damage.	Tensile: 1Kg for 30 Sec. Bending: 500g for 2 times
Exterior	No mechanical defect.	Visual
Size	Within specification	Calipers

Mechanical Characteristics

Electrical Characteristics

Item	Requirement	Test Methods
Temperature Coefficient (ppm / °C)	$R < 50\Omega$, ± 250 PPM/°C $50\Omega \leq R < 2.2\text{M}\Omega$, ± 100 PPM/°C $R \geq 2.2\text{M}\Omega$, ± 250 PPM/°C	$\text{TCR (PPM/}^\circ\text{C)} = \frac{R_2 - R_1}{R_1} \times \frac{1}{T_2 - T_1}$ T1= 25°C T2= Test Temperature ($-55^\circ\text{C} \sim +125^\circ\text{C}$) R1: Resistance at Temp. T1 R2: Resistance at Temp. T2
Short-Time Overload	$\Delta R \leq \pm (0.5\% + 0.05\Omega)$	2.5X Rated Voltage for 5 Sec. (200V max.) Measure resistance after 30 minutes.