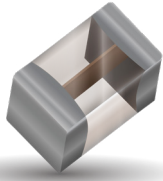


# HR02 Series

## High Reliability Resistors



### GENERAL DESCRIPTION

The HR Series is the next generation of surface mount High Value Resistors. This product was designed with our proprietary Glass Sandwich FLEXITERM® Technology. The FLEXITERM® is a surface mountable automotive and medically qualified termination that adds an extra margin against damage due to flexure during installation. The HR Series has been designed with high quality selected materials that yield excellent performance in a small size. Resistor is designed to be embedded in glass sandwich to avoid environmental conditions, and provide low burst noise at high thin film resistance values. This product is ideal for use in applications requiring surface mountable small outline EIA resistors.

### FEATURES

- EIA 0201 & 0402 Size
- Power Rating: 125 mW
- Low Current Consumption
- High Voltage
- Operating Temperature  
-40°C to +125°C
- Low Burst Noise

### APPLICATIONS

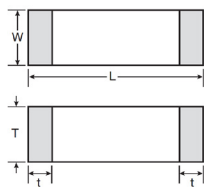
- Multi Chip Module (MCM)
- Bias Networks
- Test and Measurement Equipment
- Aerospace
- Medical
- Automotive

### HOW TO ORDER

<b>HR02</b>	<b>A</b>	<b>5R1</b>	<b>D</b>	<b>Z</b>	<b>TR</b>
Size	TCR	Resistance (Ohms)	Tolerance	Termination	Packaging
HR02 = 0402	A = ±100 ppm/°C B = ±50 ppm/°C* C = ±250 ppm/°C D = ±25 ppm/°C* E = ±200 ppm/°C	1R1 = 1.1 Ω 100 = 10 Ω 101 = 100 Ω 102 = 1,000 Ω 103 = 10,000 Ω 104 = 100,000 Ω 105 = 1,000,000 Ω 106 = 10,000,000 Ω	D = ±0.5%* F = 1% G = 2% J = 5%	7 = Nickel Gold* Z = Nickel Tin	TR = Tape & Reel W = Waffle Pack
	*Non-standard TCR values per special request		*Non-standard tolerance values per special request	*Non-standard termination per special request	

### MECHANICAL DIMENSIONS mm (inches)

<b>Length (L)</b>	1.00±0.10 (0.039±0.004)
<b>Width (W)</b>	0.50±0.10 (0.020±0.004)
<b>Thickness (T)</b>	0.50±0.10 (0.020±0.004)
<b>Terminal (t)</b>	0.25±0.15 (0.010±0.006)

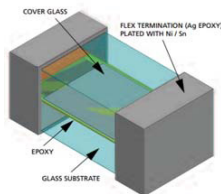


### 0402 SPECIFICATIONS

Resistor	Detail
Outline	EIA 0402
Package	Glass wafer sandwich
Maximum Voltage	1 KV
Resistance Value Range	From 200 Ohms to 30 MOhms
Termination	FLEXITERM® (Ag/Epoxy), plated
Power Rating	125 mW
Operating Temperature Range	-40°C to +125°C
Tolerances	0.5%, 1%, 2%, 5%

### RESISTOR MATERIAL (SiCr) PROPERTIES

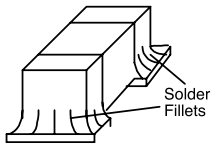
Sheet Resistance (Ohms per Square)	TCR ppm/°C
300 to 1300	±25, ±50, ±100, ±250



# HR02 Series

## High Reliability Resistors

### SUGGESTED MOUNTING PAD DIMENSIONS

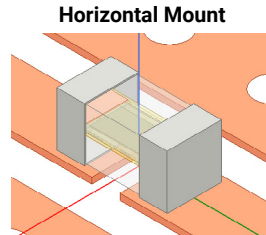
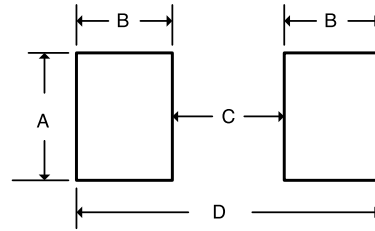


Normal Pads

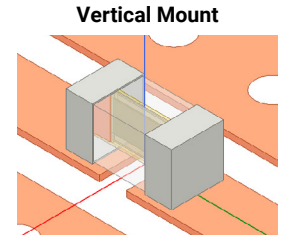
W = Chip Width L = Chip Length T = Chip Thickness

Case Size	A Min.	B Min.	C Min.	D Min.
0402	0.0213	0.0125	0.0206	0.0436

Dimensions are in inches.



Horizontal Mount



Vertical Mount

### POWER DERATING

Power Derating Curve

