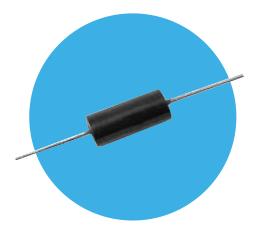
#### **Resistors**



# **Thick Film Semi-Precision** Metal Glaze™ Power Resistors

#### **GS-3 Series**

- Superior surge performance
- Resistance range from  $1\Omega$   $3M\Omega$
- Standard tolerances of ±1%, ±2%, ±5%
- Power rating of 3W @25°C; 2W @70°C
- Effective as carbon composite replacement



## **OBSOLETE**

All Pb-free parts comply with EU Directive 2011/65/EU (RoHS2)

#### **Electrical Data**

Part Number	Power Rating (Watts)	Resistance Range (Ohms)	Tolerance (±%)	TCR (±ppm/°C)	Maximum Operating Voltage (Volts)	Dielectric Withstanding Voltage (Volts)
GS-3	2.0 (@ 70°C) 3.0 (@ 25°C)	1.0 - 3M	1, 2, 5	50 (>10Ω) 100, 200 (≥ 1Ω)	1000	1000

#### **Environmental Data**

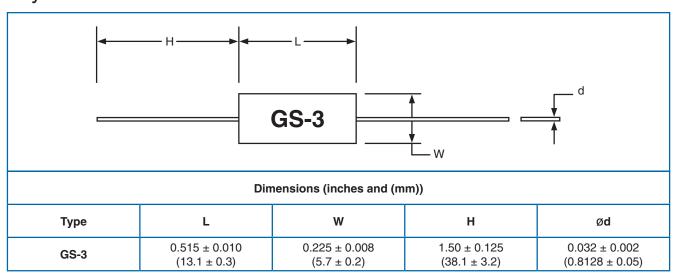
Test		Maximum ∆R Limits						
1001		MIL-R-26	MIL-R-10509D	MIL-R-22684	GS-3			
TCR	±ppm/°C	30	100	200	100/50			
Load life	%∆ <b>R</b>	0.5	1.0	2.0	2.0			
Short term overload %∆R		0.20	0.50	0.50	0.20			
Moisture	%∆ <b>R</b>	0.20	1.50	1.50	0.40			
Temperature Cycling	%∆ <b>R</b>	0.20	0.50	-	0.20			
Solder Effect	older Effect %∆R		0.50	0.50	0.20			
Termination Strength	%∆ <b>R</b>	0.10	0.20	0.50	0.10			
Shock	%∆ <b>R</b>	0.10	0.50	0.50	0.10			
Vibration	ion %∆ <b>R</b> 0.10		0.50	0.50	0.10			
Operating Temperature		-55°C to +175°C						

### **OBSOLETE**

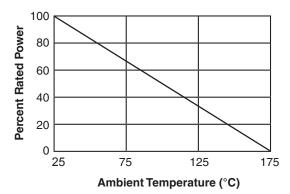


**GS-3 Series** 

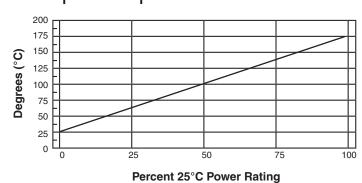
#### Physical Data



#### **Power Derating Chart**



## Hot Spot Temperature +25°C Ambient



#### **Thick Film Semi-Precision Metal Glaze™ Power Resistors**

**GS-3 Series** 

## **OBSOLETE**



### **Ordering Data**

Sample Part No. · · · · · · · · · · · · · · · · · · ·	GS	۱. [	3	100	1000	J	LF
	-	L	÷	•	•	Ÿ	L-
IRC Type · · · · · · · · · · · · · · · · · · ·			:				:
GS = (Fixed Film Resistor High Stability)			:				:
			:				
Power Rating	• • • •	• • •	•		:		:
3 = 300 @ 23 C/ 200 @ 70 C				÷		•	:
TCR Characteristics · · · · · · · · · · · · · · · · · · ·				:			
$50 = \pm 50 \text{ pmm/}^{\circ}\text{C}$							:
100 = ±100 pmm/°C 200 = ±200 pmm/°C							
(available on values greater than 10 ohms)							:
						•	
Resistance Value · · · · · · · · · · · · · · · · · · ·				• • • • • •	• • • •		
Example: 100 ohms = 1000, 1000 ohms = 1001, 150,000 o (Less than 100 ohms - "R" is used to designate decimal)							:
Example: 51 ohms = $51R0$ , 1 ohm = $1R00$ , 0.25 ohms = $R_2^2$	250					•	
							•
Tolerance						• • •	
$F = \pm 1\%$ , $G = \pm 2\%$ , $J = \pm 5\%$							:
RoHS Compliance							
LF = RoHS-compliant product	• • •	• • •	• • •			• • • •	• • •
Omit this code for SnPh finish							