



## RGU Series Datasheet

Metal Glaze Film Resistors | Radial |  
Hi-temp. solder contacts | Bakelite Moulded

### ORDERING CODE-Example

New SAP Part Nr.:

RGU	-50	G	B	-	RD-	10R	AA
Serie	Power rating -50 = 0,5W	Tol. D = ±0,5% F = ±1% G = ±2%	Pack-Code B = Bulk	TCR - Base on spec.	Forming type RD- = Radial	R Value	Special AA = Standard

Historical VTM Part Nr.:

RGU526 - 0	2	T	10R
Type	Tol.	Pack-Code	R Value

### APPLICATIONS

- Automotive
- Charger
- Alternative Energy
- Power Supply
- Home Appliances
- Industrial

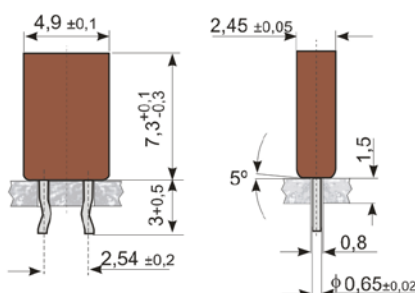
### FEATURES

- Unflammable acc. to IEC 695-2-2
- High insulation voltage
- RoHs & REACH Compliant

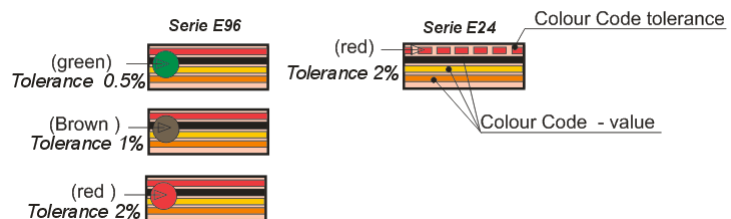
### ELECTRICAL SPECIFICATIONS

Type		RGU-50
Historical Part Number		RGU526-0
Nominal Power Rating P <sub>70</sub>	[W]	0,5
Resistance Range	Min. [Ω]	R3
	Max. [Ω]	3M32
E-Series (preferred)		E24 (1% ; 2%) ; E96 (0,5% ; 1%)
Tolerances	±[%]	D = 0,5% ; F = 1% ; G = 2%
Temperature Coefficient	±[10 <sup>-6</sup> K <sup>-1</sup> ]	Depends on the value, please check the table below
Working Temperature Range	[°C]	-55 ... +175
Thermal Resistance	[KW <sup>-1</sup> ]	90
Insulation Resistance IEC60115-1 clause 4.6	[MΩ]	> 10 <sup>4</sup>
Max. Working Voltage	[V] <sub>RMS</sub>	350
Dielectric Withstanding Voltage IEC115-1 clause 4.7 (1[min])	[V] <sub>RMS</sub>	1000

### DIMENSIONS [mm]



Color code examples:



NOTE: To read the value, put the dot the left side and read from down side to upside

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### PERFORMANCE DATE

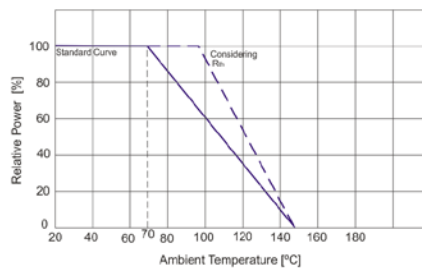
Type		<b>RGU-50</b>
Historical Part Number		RGU526-0
Derating Linear	[°C]	70...175 (0W)
Climatic Category		55/155/56
Voltage Coefficient <i>IEC60115-1 clause 4.11</i>	[10 <sup>-6</sup> V <sup>-1</sup> ]	< 30
Failure Rate <i>(Total, θ<sub>o</sub>, max, 60[%] cont. lev.)</i>	[10 <sup>-9</sup> h <sup>-1</sup> ]	< 1
Endurance <i>IEC60115-1 clause 4.25 (P<sub>70</sub> @ 70[°C], 1000[h])</i>	±[%]	0,5
Damp Heat, Steady State <i>IEC60115-1 clause 4.24 (40[°C], 93[% r.h.], 56[d])</i>	±[%]	1,0
Climatic Sequence <i>IEC60115-1 clause 4.23</i>	±[%]	1,0
Resistance to Soldering Heat <i>IEC60115-1 clause 4.18 (260<sup>±5</sup>[°C], 3.5<sup>±1</sup>[s])</i>	±[%]	0,1
Terminal Strength	±[%]	0,2
Terminal Tensile Strength	[N]	40
Solderability <i>IEC60068-2-20 (245<sup>±5</sup>[°C] 3<sup>±0,5</sup>[s])</i>		Solder bath method (> 95% coverage)
Current Noise <i>IEC60195</i>	[dB]	R < 1K: -20 ; R > 1K ± 20/decade
Nonlinearity <i>IEC60440</i>	[dB]	110 -20 /decade
Marking <i>IEC60062</i>		Color code (6 th band for TC ; < 1R 4 bands )

### TEMPERATURE COEFFICIENT

Resistance range	Tolerance	TCR	E-Series
R3 ... 3M3	± 2%	± 100 ppm/K *	E24
R3... 9R1	± 1%		
10R... 3M32	± 1%	± 50 ppm/K	E24 / E96
10R... 1M	± 0,5%		E96

\* R < 1R TC200

### DERATING CURVE



### PACKAGING

The standard packaging for RGU in Radial type is Bulk, dimensions below.



Type	Historical P/N:	Pack Code	Pieces
<b>RGU-50</b>	RGU526 - 0	B = Bulk	1000