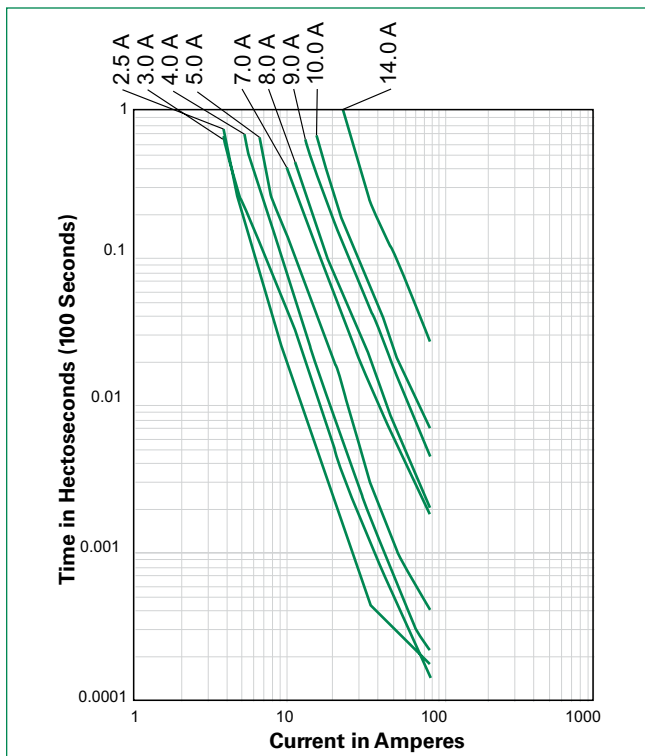


**Temperature Derating**

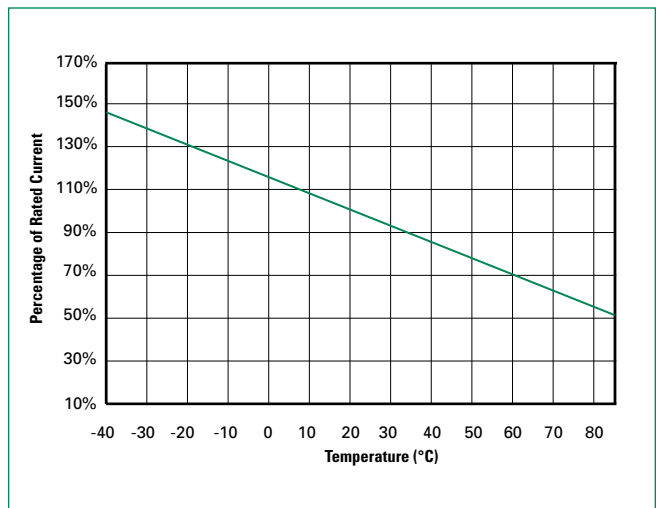
		Ambient Operation Temperature								
		-40°C	-20°C	0°C	20°C	40°C	50°C	60°C	70°C	85°C
Part Number		Hold Current (A)								
16R250G		3.7	3.3	2.9	2.5	2.2	2.0	1.8	1.6	1.3
16R300G		4.4	4.0	3.5	3.0	2.6	2.4	2.1	1.9	1.6
16R400G		5.9	5.3	4.7	4.0	3.5	3.2	2.9	2.6	2.1
16R500G		7.4	6.6	5.9	5.0	4.4	4.0	3.6	3.2	2.6
16R700G		10.4	9.3	8.2	7.0	6.1	5.6	5.0	4.5	3.7
16R800G		11.8	10.6	9.4	8.0	7.0	6.3	5.7	5.1	4.2
16R900G		13.3	12.0	10.6	9.0	7.8	7.1	6.5	5.8	4.7
16R1000G		14.8	13.3	11.8	10.0	8.7	7.9	7.1	6.4	5.3
16R1400G		20.7	18.6	16.5	14.0	12.2	11.1	10.0	9.0	7.4

**Average Time Current Curves**



The average time current curves and Temperature Derating curve performance is affected by a number of variables, and these curves provided as guidance only. Customer must verify the performance in their application.

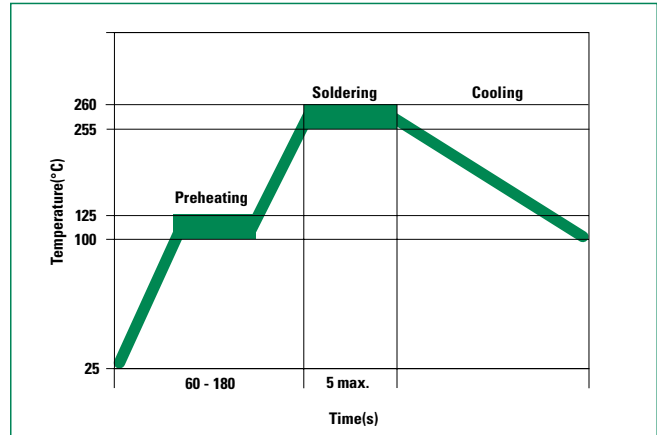
**Temperature Derating Curve**



**Note:**  
Typical Temperature derating curve, refer to table for derating data

**Soldering Parameters - Wave Soldering**

<b>Pre-Heating Zone</b>	Refer to the condition recommended by the flux manufacturer. Max. ramping rate should not exceed 4°C/Sec.
<b>Soldering Zone</b>	Max. solder temperature should not exceed 260°C. Time within 5°C of actual Max. solder temperature within 3 - 5 seconds. Total time from 25°C room to Max. solder temperature within 5 minutes including Pre-Heating time.
<b>Cooling Zone</b>	Cooling by natural convection in air. Max. ramping down rate should not exceed 6°C/Sec.



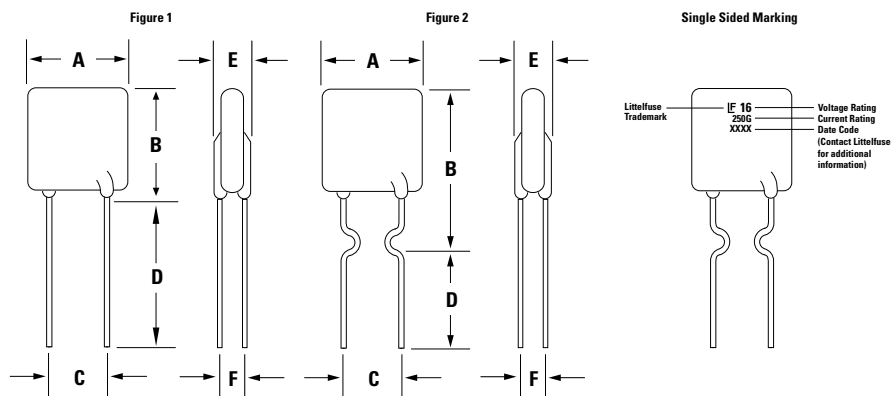
**Physical Specifications**

<b>Lead Material</b>	2.5A: Tin-plated Copper clad Steel 3.0 - 14.0A: Tin-plated Copper
<b>Soldering Characteristics</b>	Solderability per MIL-STD-202, Method 208
<b>Insulating Material</b>	Cured, flame retardant epoxy polymer meets UL94V-0 requirements.
<b>Device Labeling</b>	Marked with 'LF', voltage, current rating, and date code.

**Environmental Specifications**

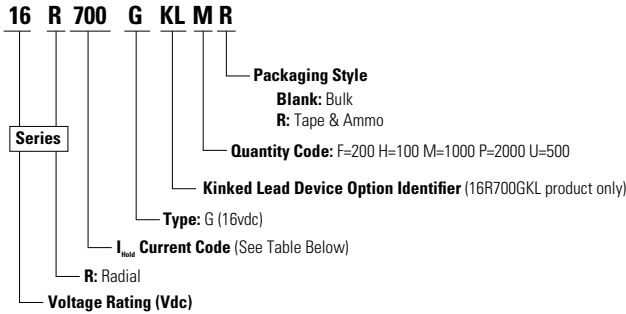
<b>Operating/Storage Temperature</b>	-40°C to +85°C
<b>Maximum Device Surface Temperature in Tripped State</b>	125°C
<b>Passive Aging</b>	+85°C, 1000 hours -/+5% typical resistance change
<b>Humidity Aging</b>	+85°C, 85% R.H., 1000 hours -/+5% typical resistance change
<b>Thermal Shock</b>	+85°C to -40°C 10 times -/+5% typical resistance change
<b>Solvent Resistance</b>	MIL-STD-202, Method 215 No change
<b>Moisture Resistance Level</b>	Level 1, J-STD-020

**Dimensions & Part Marking System**



Part Number	Figure	A		B		C		D		E		F		Physical Characteristics		
		Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Lead (dia)		Material
		Max.	Max.	Max.	Max.	Typ.	Typ.	Min.	Min.	Max.	Max.	Typ.	Typ.	Inches	mm	
16R250G	2	0.35	8.90	0.50	12.80	0.20	5.1	0.13	3.18	0.12	3.00	0.035	0.9	0.020	0.51	Sn/CuFe
16R300G	1	0.28	7.10	0.43	11.00	0.20	5.1	0.30	7.6	0.12	3.00	0.047	1.2	0.032	0.81	Sn/Cu
16R400G	1	0.35	8.90	0.50	12.80	0.20	5.1	0.30	7.6	0.12	3.00	0.047	1.2	0.032	0.81	Sn/Cu
16R500G	1	0.41	10.40	0.56	14.30	0.20	5.1	0.30	7.6	0.12	3.00	0.047	1.2	0.032	0.81	Sn/Cu
16R700G	1	0.44	11.20	0.78	19.70	0.20	5.1	0.30	7.6	0.12	3.00	0.047	1.2	0.032	0.81	Sn/Cu
16R800G	1	0.50	12.70	0.82	20.90	0.20	5.1	0.30	7.6	0.12	3.00	0.047	1.2	0.032	0.81	Sn/Cu
16R900G	1	0.55	14.00	0.85	21.70	0.20	5.1	0.30	7.6	0.12	3.00	0.047	1.2	0.032	0.81	Sn/Cu
16R1000G	1	0.65	16.50	0.99	25.20	0.20	5.1	0.30	7.6	0.12	3.00	0.047	1.2	0.032	0.81	Sn/Cu
16R1400G	1	0.93	23.50	1.10	27.90	0.40	10.2	0.30	7.6	0.14	3.50	0.055	1.4	0.039	1.00	Sn/Cu

### Part Ordering Number System



### Packaging Options

Part Number	Ordering Number	$I_{hold}$ (A)	$I_{hold}$ Code	Packaging Option	Quantity	Quantity & Packaging Codes
16R250G	16R250GU	2.50	250	Bulk	500	U
16R300G	16R300GU	3.00	300	Bulk	500	U
	16R300GPR			Tape and Ammo	2000	PR
16R400G	16R400GU	4.00	400	Bulk	500	U
	16R400GPR			Tape and Ammo	2000	PR
16R500G	16R500GU	5.00	500	Bulk	500	U
	16R500GPR			Tape and Ammo	2000	PR
16R700G	16R700GMR	7.00	700	Tape and Ammo	1000	MR
16R800G	16R800GF	8.00	800	Bulk	200	F
16R900G	16R900GF	9.00	900	Bulk	200	F
	16R900GMR			Tape and Ammo	1000	MR
16R1000G	16R1000GMR	10.00	1000	Tape and Ammo	1000	MR
16R1400G	16R1400GH	14.00	1400	Bulk	100	H

#### WARNING

- Users shall independently assess the suitability of these devices for each of their applications
- Operation of these devices beyond the stated maximum ratings could result in damage to the devices and lead to electrical arcing and/or fire
- These devices are intended to protect against the effects of temporary over-current or over-temperature conditions and are not intended to perform as protective devices where such conditions are expected to be repetitive or prolonged in duration
- Exposure to silicon-based oils, solvents, electrolytes, acids, and similar materials can adversely affect the performance of these PPTC devices
- These devices undergo thermal expansion under fault conditions, and thus shall be provided with adequate space and be protected against mechanical stresses
- Circuits with inductance may generate a voltage ( $L di/dt$ ) above the rated voltage of the PPTC device.

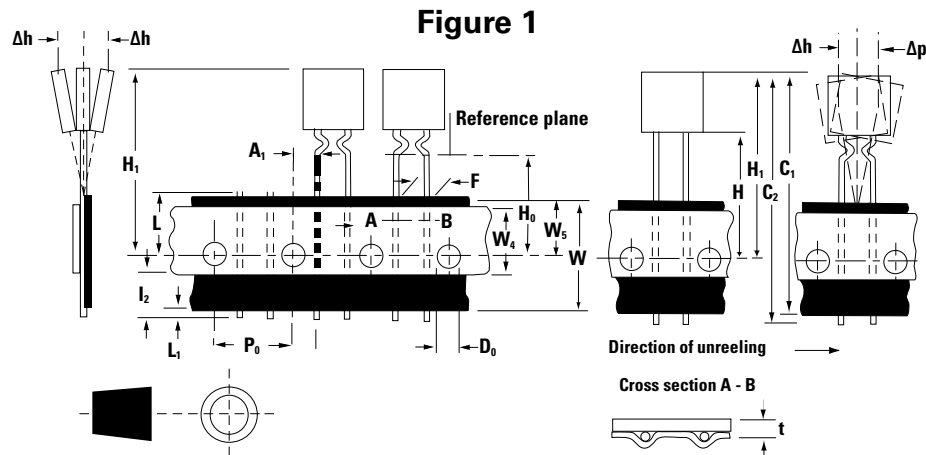
**Tape and Ammo Specifications**

Devices taped using EIA468-B/IE286-2 standards. See table below and Figure 1 for details.

Dimension	EIA Mark	IEC Mark	Dimensions	
			Dim. (mm)	Tol. (mm)
Carrier tape width	<b>W</b>	<b>W</b>	18	-0.5 /+1.0
Hold down tape width:	<b>W<sub>4</sub></b>	<b>W<sub>0</sub></b>	11	min.
Top distance between tape edges	<b>W<sub>6</sub></b>	<b>W<sub>2</sub></b>	3	max.
Sprocket hole position	<b>W<sub>5</sub></b>	<b>W<sub>1</sub></b>	9	-0.5 /+0.75
Sprocket hole diameter*	<b>D<sub>0</sub></b>	<b>D<sub>0</sub></b>	4	-0.32 /+0.2
Abscissa to plane(straight lead)	<b>H</b>	<b>H</b>	18.5	-/+ 3.0
Abscissa to plane(kinked lead)	<b>H<sub>0</sub></b>	<b>H<sub>0</sub></b>	16	-/+ 0.5
Abscissa to top	-	-	45.0	max.
Overall width w/o lead protrusion	-	-	56	max.
Overall width w/ lead protrusion	-	-	57	max.
Lead protrusion	<b>L<sub>1</sub></b>	<b>I<sub>1</sub></b>	1.0	max.
Protrusion of cut out	<b>L</b>	<b>L</b>	11	max.
Protrusion beyond hold-down tape	<b>I<sub>2</sub></b>	<b>I<sub>2</sub></b>	Not specified	
Sprocket hole pitch	<b>P<sub>0</sub></b>	<b>P<sub>0</sub></b>	25.4	-/+ 0.5
Device pitch:	-	-	25.4	
Pitch tolerance	-	-	20 consecutive.	-/+ 1
Tape thickness	<b>t</b>	<b>t</b>	0.9	max.
Tape thickness with splice	<b>t<sub>1</sub></b>	-	2.0	max.
Splice sprocket hole alignment	-	-	0	-/+ 0.3
Body lateral deviation	<b>Δh</b>	<b>Δh</b>	0	-/+ 1.0
Body tape plane deviation	<b>Δp</b>	<b>Δp</b>	0	-/+ 1.3
Ordinate to adjacent component lead*	<b>P<sub>1</sub></b>	<b>P<sub>1</sub></b>	3.81	-/+ 0.7
Ordinate to adjacent component lead*	-	-	7.62	-/+ 0.7
Lead spacing:16R250G-16R1000G	<b>F</b>	<b>F</b>	5.08	-/+ 0.8
Lead spacing:16R1400G	<b>F</b>	<b>F</b>	10.18	-/+ 0.8

\*Differs from EIA specification

**Tape and Ammo Diagram**



Disclaimer Notice - Information furnished is believed to be accurate and reliable. However, users should independently evaluate the suitability of and test each product selected for their own applications. Littelfuse products are not designed for, and may not be used in, all applications. Read complete Disclaimer Notice at [www.littelfuse.com/disclaimer-electronics](http://www.littelfuse.com/disclaimer-electronics).

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

## Littelfuse:

[RGE1200B](#) [16R250GU](#) [16R250GPR](#) [16R300GU](#) [16R300GPR](#) [16R400GU](#) [16R400GPR](#) [16R500GU](#) [16R500GPR](#)  
[16R600GU](#) [16R700GF](#) [16R700GMR](#) [16R800GF](#) [16R800GMR](#) [16R900GF](#) [16R900GMR](#) [16R1000GF](#)  
[16R1000GMR](#) [16R1100GF](#) [16R1100GMR](#) [16R1200GH](#) [16R1200GMR](#) [16R1400GH](#) [16R600GDR](#) [16R1200SGU](#)  
[16R250SGPR](#) [16R1400SGU](#) [16R600SGPR](#) [16R500SGPR](#) [16R700SGPR](#) [16R250SGU](#) [16R900SGU](#) [16R1100SGU](#)  
[16R800SGPR](#) [16R500SGU](#) [16R300SGU](#) [16R600SGU](#) [16R1100SGPR](#) [16R400SGPR](#) [16R1000SGU](#)  
[16R900SGPR](#) [16R2000SGF](#) [16R400SGU](#) [16R1200SGPR](#) [16R700SGU](#) [16R1500SGPR](#) [16R1400SGPR](#)  
[16R1000SGPR](#) [16R300SGPR](#) [16R800SGU](#) [16R1500SGU](#) [16R1750SGF](#)