

Specifications Per

- IEC 60115-1

Features

- Flameproof multi-layer coating equivalent to UL 94 V-0
- Flameproof feature equivalent to overload test UL 1412
- Color code per MIL & EIA standards
- Special tin-plated electrolytic copper lead wire
- Products meet RoHS requirements and do not contain substances of very high concern identified by European Chemicals Agency

■ DIMENSIONS

Type	Body Length (L , mm)	Body Diameter (D, mm)	Lead Wire Length (H , mm)	Lead Wire Diameter (d , mm)	Net Weight Per 1000Pcs
FGE25	6.5 ± 0.5	2.4 ± 0.2	26 ± 3.0	0.55 ± 0.03	220 grams
FGE26	6.5 ± 0.5	2.4 ± 0.2	26 ± 3.0	0.55 ± 0.03	220 grams
FGE53	6.5 ± 0.5	2.4 ± 0.2	26 ± 3.0	0.55 ± 0.03	220 grams

■ GENERAL SPECIFICATIONS

Type	Power Rating (at 70°C)	Maximum Working Voltage	Minimum Resistance	Maximum Resistance	Resistance Tolerance	Available Resistance Values
FGE25	1/4W	250V	2.2Ω	15KΩ	±5%	E-24
FGE26	1/3W	250V	2.2Ω	15KΩ	±5%	E-24
FGE53	1/2W	350V	2.2Ω	10KΩ	±5%	E-24

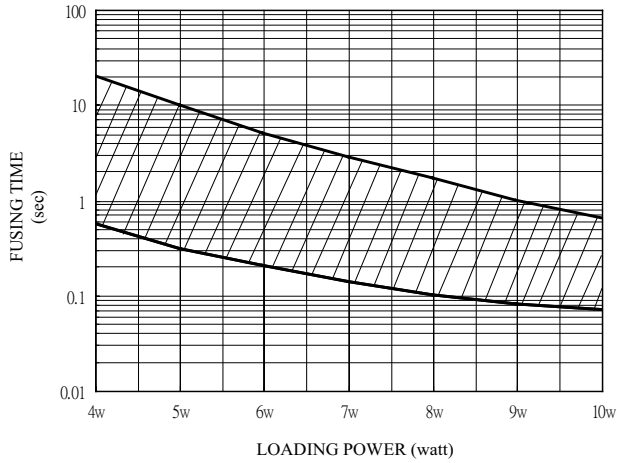
Other resistance values and higher wattages available on request.

*Quality • Reliability
Cost-Down via Innovation*

FGE

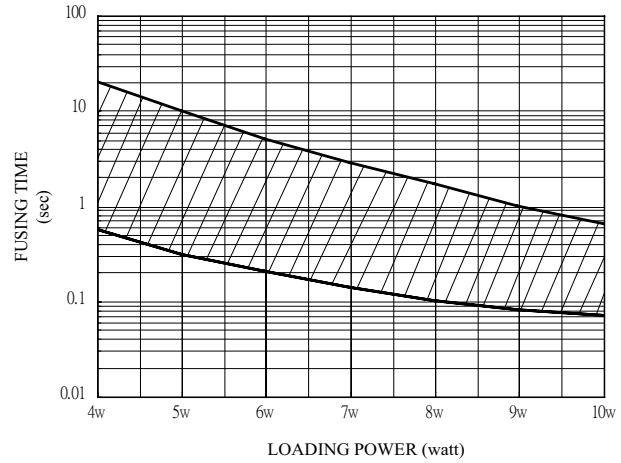
FGE25

FUSING CHARAC TERISTICS
USING CONST ANT VOLTAGE



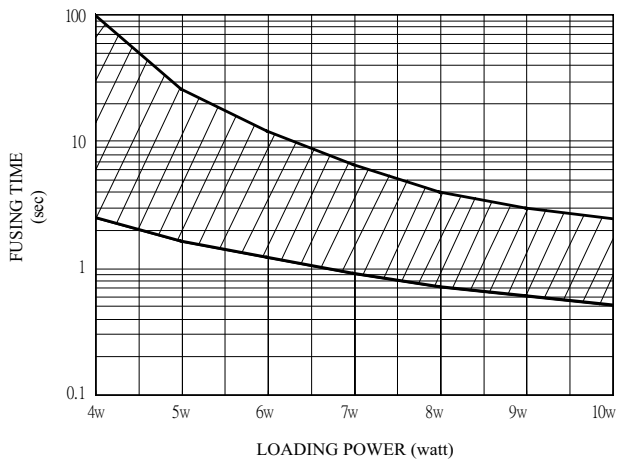
FGE26

FUSING CHARAC TERISTICS
USING CONST ANT VOLTAGE



FGE53

FUSING CHARAC TERISTICS
USING CONST ANT VOLTAGE



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FGE

■ PART NUMBER

Example: FGE53J10K0TKZTB5K0

FGE53	J	10K0	TKZ	TB5K0
Type	Tolerance	Resistance	TCR	Packaging
	J (5%)	10KΩ 4-character code containing - 3 significant digits 1 letter multiplier OHM MULTIPLIER R = 1 K = 10 ³ M = 10 ⁶ G = 10 ⁹	3-character code TKZ = Default Product Temperature Coefficient. Information of typical product temperature coefficient can be found in the Technical Summary section of the datasheet.*	5-character code TB = Tape Box (pieces per box) <u>FGE25/26/53</u> 5K0 = 5,000

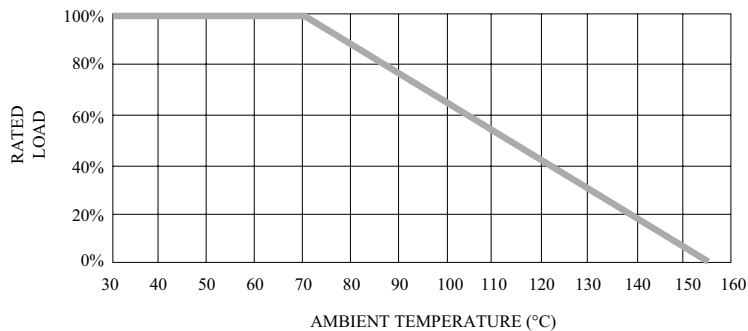
* For the availabilities of non-default temperature coefficient, please check with us. Reference for TCR letter codes can be found in section (4) of Part Number Construction in the Appendices.

■ TECHNICAL SUMMARY

Characteristics	Limits
Dielectric Withstanding Voltage, VAC or DC	500
Temperature Coefficient, PPM / °C*	±200
Operating Temperature Range, °C	-55 ~ +155
Insulation Resistance, MΩ	10 ⁴

* Not applicable to all resistance values. Please check with us regarding the PPM of specific resistance value(s).

■ POWER DERATING CURVE

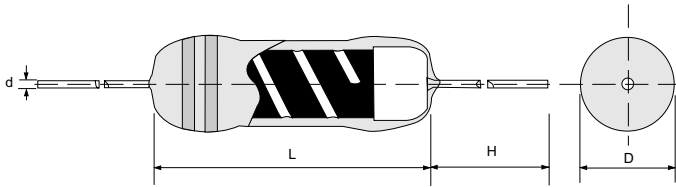


■ PERFORMANCE SPECIFICATIONS

Characteristics	Test Conditions	Limits
Load Life In Humidity	IEC 60115-1 4.24 56 days rated load (not over max. working voltage) at (40±2)°C and (93±3)% relative humidity	±5%
Load Life	IEC 60115-1 4.25.1 Rated load (not over max. working voltage) 1,000 hours with 1.5 hours ON, 0.5 hours OFF, at (70±2)°C	±5%
Resistance To Soldering Heat	IEC 60115-1 4.18.2 Leads immersed till 3mm from the body in (260±5)°C solder for 10±1 seconds	±1%
Solderability	IEC 60115-1 4.17.2 Solder area covered after (235±3)°C/(2±0.2) seconds with flux applied	95% min.coverage
Vibration	IEC 60115-1 4.22 Six hours in each parallel and axial direction with a simple harmonic motion having an amplitude of 1.52mm and 10 to 2,000 Hz.	±1%
Thermal Endurance	IEC 60115-1 4.25.3 1000 hours at 155°C without load	±1%
Thermal Shock	IEC 60115-1 4.19 -55°C 30minutes, +155°C 30minutes, 5 cycles	±1%

Quality • Reliability
Cost-Down via Innovation

FGE



Specifications Per

• IEC 60115-1, IEC 60115-4

Features

- Flameproof multi-layer coating equivalent to UL 94 V-0
- Flameproof feature equivalent to overload test UL 1412
- Color code per MIL & EIA standards
- Special tin-plated electrolytic copper lead wire
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DIMENSIONS

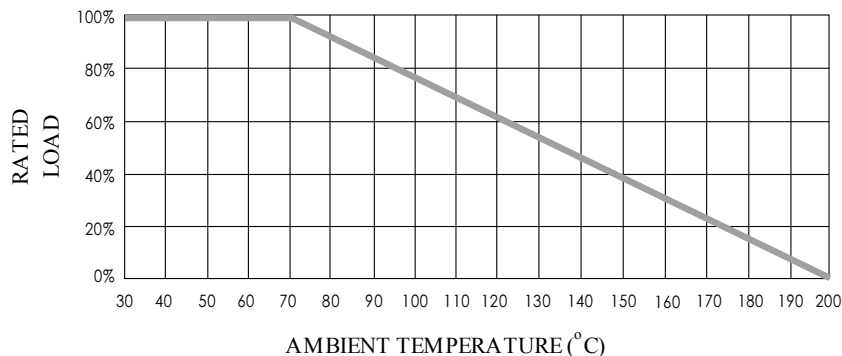
Type	Body Length (L, mm)	Body Diameter (D, mm)	Lead Wire Length (H, mm)	Lead Wire Diameter (d, mm)	Net Weight Per 1000Pcs
FGE50	9.00 ± 1.0	3.2 ± 0.2	28 ± 3.0	0.6 ± 0.03	340 Grams
FGE101	9.00 ± 1.0	3.2 ± 0.2	28 ± 3.0	0.6 ± 0.03	340 Grams
FGE100	11.0 ± 1.0	4.0 ± 0.5	28 ± 3.0	0.7 ± 0.03	500 grams
FGE201	11.0 ± 1.0	4.0 ± 0.5	28 ± 3.0	0.8 ± 0.03	510 grams
FGE200	11.0 ± 1.0	4.5 ± 0.5	28 ± 3.0	0.8 ± 0.03	500 grams
FGE301	13.5 ± 1.0	5.0 ± 0.5	30 ± 3.0	0.8 ± 0.03	1050 grams

GENERAL SPECIFICATIONS

Type	Power Rating (at 70°C)	Maximum Working Voltage	Maximum Overload Voltage	Minimum Resistance	Maximum Resistance	Resistance Tolerance	Available Resistance Values
FGE50	1/2W	300V	600V	2.2Ω	10KΩ	±5%	E-24
FGE101	1W	300V	600V	2.2Ω	10KΩ	±5%	E-24
FGE100	1W	350V	600V	2.2Ω	10KΩ	±5%	E-24
FGE201	2W	350V	600V	2.2Ω	10KΩ	±5%	E-24
FGE200	2W	350V	600V	2.2Ω	10KΩ	±5%	E-24
FGE301	3W	350V	700V	2.2Ω	10KΩ	±5%	E-24

* Please contact us for 3W type (FGE301), resistance values, sizes, or specifications not listed.

POWER DERATING CURVE



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■ PART NUMBER

Example: FGE101J10K0TKZTB2K0

FGE101	J	10K0	TKZ	TB2K0
Type	Tolerance	Resistance	TCR	Packaging
	J (5%)	10KΩ 4-character code containing - 3 significant digits 1 letter multiplier <u>OHM MULTIPLIER</u> R = 1 K = 10 ³ M = 10 ⁶ G = 10 ⁹	3-character code TKZ = Default Product Temperature Coefficient. Information of typical product temperature coefficient can be found in the Technical Summary section of the datasheet.*	5-character code TB = Tape Box (pieces per box) <u>FGE50/101</u> 2K0 = 2,000 <u>FGE100/201/200</u> 1K0 = 1,000 <u>FGE301</u> 500 = 500

* For the availabilities of non-default temperature coefficient, please check with us. Reference for TCR letter codes can be found in section (4) of Part Number Construction in the Appendices.

■ TECHNICAL SUMMARY

Characteristics	Limits	
Dielectric Withstanding Voltage, V AC or DC	FGE50 FGE101 FGE100 FGE200 / 201 / 301	300 350 500 700
Temperature Coefficient, PPM/°C*	FGE50 / 101 / 100 / 201	±200, ±400
	FGE200	±200
	FGE301	±400
Operating Temperature Range, °C	-55~+200	
Insulation Resistance, MΩ	10 ⁴	
Fusing Condition, W	Interrupts in max. 60 seconds at below overload FGE50: 8 FGE101 / FGE100 / 201: 16 FGE200: 20 FGE301: 24	

* Not applicable to all resistance values. Please check with us regarding the PPM of specific resistance value(s).

■ PERFORMANCE SPECIFICATIONS

Characteristics	Test Conditions	Limits
Short Time Overload	IEC 60115-1 4.13 2 seconds 2.5x rated voltage (not over max. overload voltage)	±5%
Load Life In Humidity	IEC 60115-1 4.24 56 days rated load (not over max. working voltage) at (40±2)°C and (93±3)% relative humidity	±5%
Load Life	IEC 60115-1 4.25.1 Rated load (not over max. working voltage) 1,000 hours with 1.5 hours ON, 0.5 hours OFF, at (70±2)°C	±5%
Resistance To Soldering Heat	IEC 60115-1 4.18.2 Leads immersed till 3mm from the body in (260±5)°C solder for 10±1 seconds	±1%
Solderability	IEC 60115-1 4.17.2 Solder area covered after (230±3)°C/(2±0.2) seconds with flux applied	95% min.coverage
Vibration	IEC 60115-1 4.22 Six hours in each parallel and axial direction with a simple harmonic motion having an amplitude of 1.52mm and 10 to 2,000 Hz.	±1%
Thermal Endurance	IEC 60115-1 4.25.3 1000 hours at 200°C without load	±1%
Thermal Shock	IEC 60115-1 4.19 -55°C 30minutes, +155°C 30minutes, 5 cycles	±2%