Elektronische Bauelemente

GBU1016G

Voltage 1600V

10.0 Amp Glass Passivated Bridge Rectifiers

RoHS Compliant Product

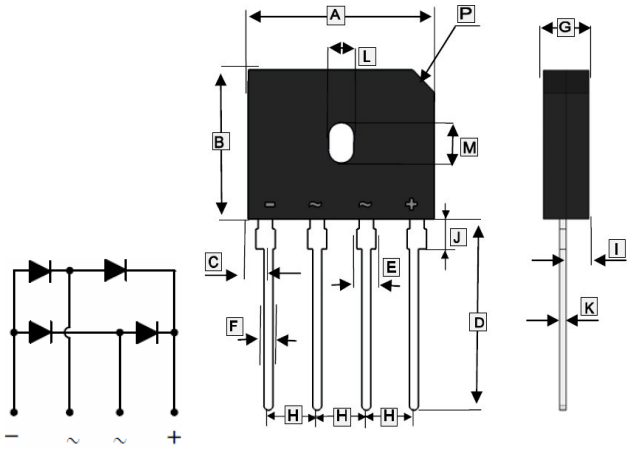
FEATURES

- Glass Passivated Die Construction
- Low Forward Voltage Drop
- High Current Capability
- High Surge Current Capability
- High Surge Current Capability
- Plastic Material-UL Flammability 94V-0

MECHANICAL DATA

- Case: GBU, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Case
- Mounting Position: Any
- Marking: Type Number

GBU



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	21.70	22.30	H	4.80	5.33
B	18.20	19.10	I	1.80	2.66
C	3.40 REF.		J	1.80	2.54
D	17.27	18.50	K	0.40	0.60
E	1.80	2.54	L	3.50	4.10
F	0.90	1.30	M	5.70 TYP.	
G	3.30	3.80	P	3*45 TYP.	

ORDER INFORMATION

Part Number	Type
GBU1016G	Lead (Pb)-free
GBU1016GH	Lead (Pb)-free and Halogen-free

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Rating 25℃ ambient temperature unless otherwise s pecified. Single phase half wave, 60Hz, resistive or inductive load. For capacitive load, de-rate current by 20%.)

Parameter		Symbol	Part Number	Unit
Peak Repetitive Reverse Voltage		V_{RRM}	1600	V
Working Peak Reverse Voltage		V_{RWM}	1600	
DC Blocking Voltage		V_{DC}	1600	
RMS Reverse Voltage		V_{RMS}	1120	
Average Rectified Output Current @T_C=90℃	With Heatsink	I_F	10	A
	Without Heatsink		3.3	
Non-Repetitive Peak Forward Surge Current, 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)		I_{FSM}	200	A
I^2t Rating for Fusing (t<8.3ms)		I^2t	166	A^2S
Forward Voltage per element	I_F=5A	V_F	1.05	V
Peak Reverse Current @Rated DC Blocking Voltage	T_A=25℃	I_R	5	μA
	T_A=125℃		500	
Typical Junction Capacitance per leg [1]		C_J	180	pF
Thermal Resistance		$R_{\theta JA}$	28	℃/W
		$R_{\theta JC}$	8.7	
		$R_{\theta JL}$	5.3	
Operating & Storage Temperature Range		T_J,T_{STG}	150, -55~150	℃

Notes:

1. Measured at 1MHz and applied reverse voltage of 4V D.C.

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CHARACTERISTIC CURVES

Fig. 1 Forward Current Derating Curve

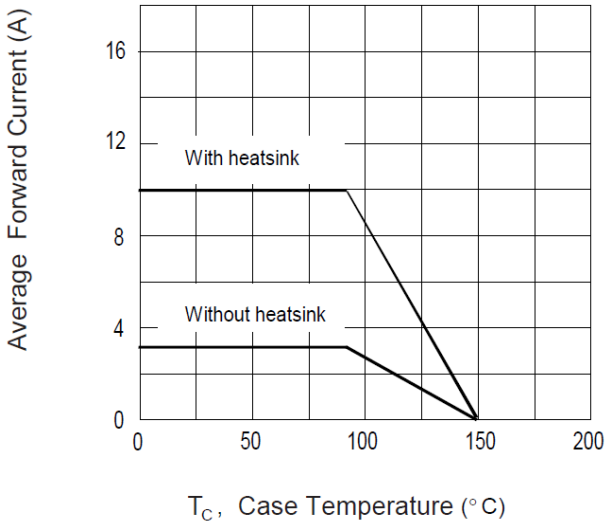

Fig. 2 Typ. Forward Characteristics

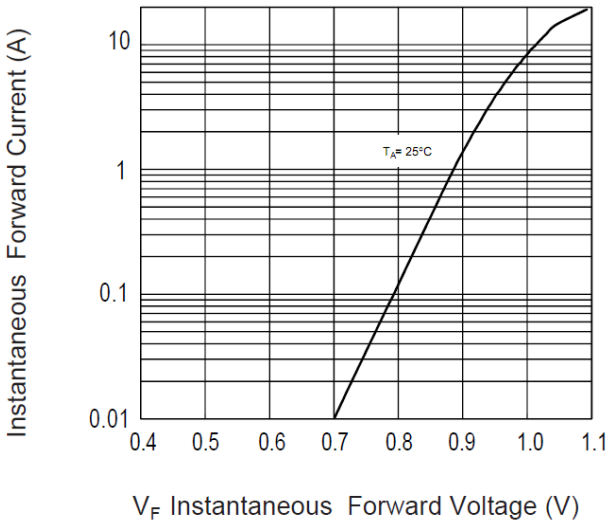

Fig.3 Maximum Peak Forward Surge Current

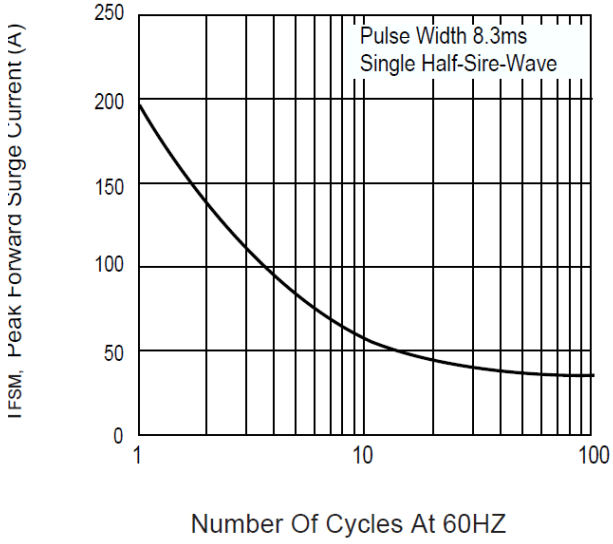

Fig.4 Typical Reverse Characteristics