Elektronische Bauelemente

GBU25005 ~ GBU2510

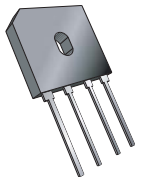
50 V ~ 1000 V

25.0 Amp High Current Glass Passivated Molding Single-Phase Bridge Rectifier

RoHS Compliant Product

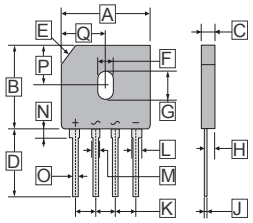
A suffix of "-C" specifies halogen-free and RoHS Compliant

GBU



FEATURES

- Surge overload rating -350 amperes peak
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- Plastic material has U/L flammability classification 94V-0
- Mounting position：Any



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	21.80	22.20	J	0.46	0.56
B	18.30	19.10	K	4.80	5.30
C	3.37	3.53	L	2.16	2.54
D	17.27	18.29	M	1.65	2.03
E	3.2 x 45°		N	1.45	1.85
F	3.70	3.90	O	0.90	1.20
G	5.70	5.90	P	9.80	10.20
H	2.30	2.70	Q	10.90	11.10

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave , 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%

PARAMETERS	SYMBOL	PART NUMBERS							UNITS
		GBU 25005	GBU 2501	GBU 2502	GBU 2504	GBU 2506	GBU 2508	GBU 2510	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum DC Reverse Current @T_J=25°C	I_R	10.0							μA
at Rated DC Blocking Voltage @T_J=125°C		500							
Maximum Average Forward (with heatsink Note 2)	$I_{(AV)}$	25.0							A
Rectified Current @T_C=100°C (without heatsink)		4.2							
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	350							A
Rating For Fusing (t < 8.3ms)	I^2t	200							A^2s
Maximum Forward Voltage @ 12.5A DC	V_F	1.1							V
Typical Junction Capacitance Per Element (Note 1)	C_J	70							pF
Typical Thermal Resistance	$R_{\theta JC}$	2.2							°C / W
Operating and Storage Temperature Range	T_J , T_{STG}	-55 ~ 150							°C

Notes：

1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
2. Device mounted on 100mm * 100mm * 1.6mm Cu plate heatsink.

CHARACTERISTIC CURVES

FIG.1-MAXIMUM FORWARD SURGE CURRENT

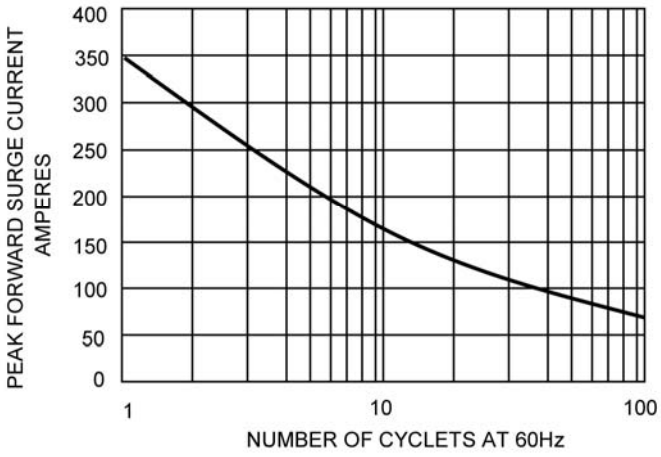


FIG.2- DERATING CURVE OUTPUT RECTIFIED CURRENT

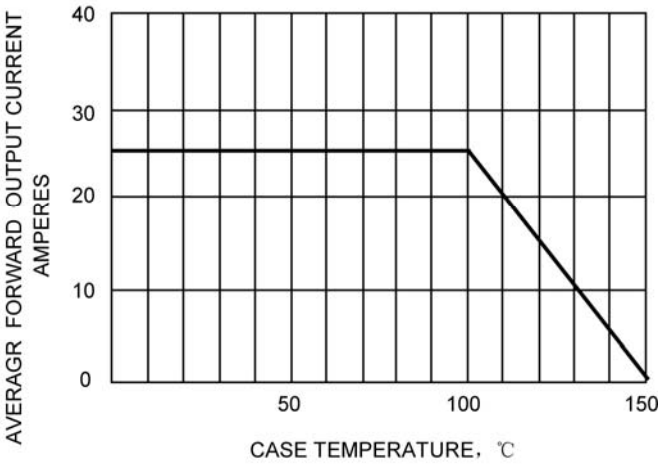


FIG.3-TYPICAL FORWARD CHARACTERISTICS

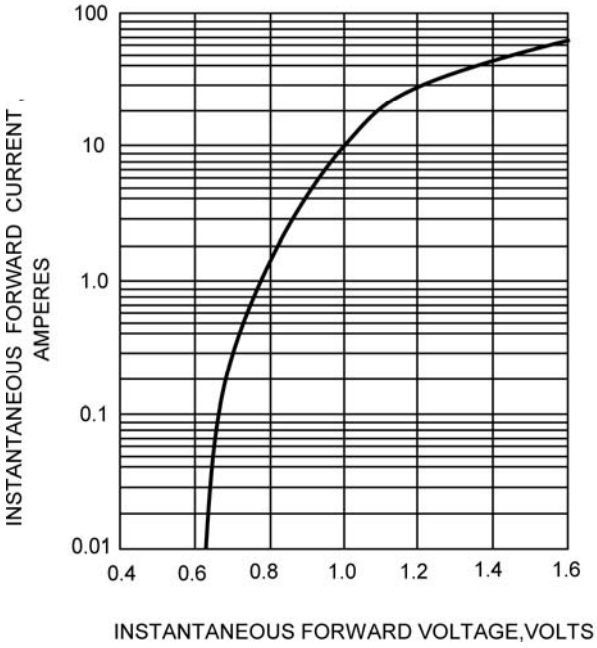


FIG.4-TYPICAL REVERSE CHARACTERISTICS