MOSPEC

GBU6A THRU GBU6K

6.0A GLASS PASSIVATED BRIDGE RECTIFIER

FEATURES

- ＊Glass Passivated Die Construction
- ＊Low Forward Voltage Drop
- ＊High Current Capability
- ＊High Reliability
- ＊High Surge Current Capability

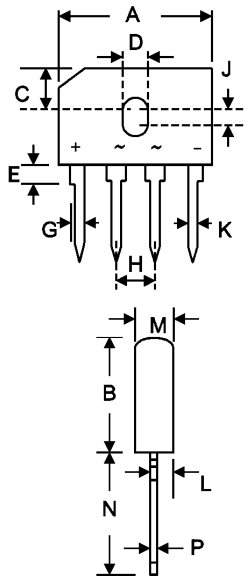
MECHANICAL DATA

- ＊Case: Molded Plastic
- ＊Epoxy: UL94V-O rate flame retardant
- ＊Terminals：Plated Leads Solderable Per MIL-STD-202 Method 208
- ＊Polarity：As Marking on Body
- ＊Mounting Position: Any
- ＊Weight： 4.0 gram (approx.)
- ＊Marking:Type Number

Plating pb free

The marking is indicated by part no. + “M”.

ex: GBU6AM ~GBU6KM



GBU		
Dim	Min	Max
A	21.80	22.30
B	18.30	18.80
C	7.40	7.90
D	3.50	4.10
E	1.52	2.03
G	2.16	2.54
H	4.83	5.33
J	1.65	2.16
K	1.02	1.27
L	0.76	1.02
M	3.30	3.56
N	17.50	18.00
P	0.46	0.56
Unit :mm		

MAXIMUM RATINGS AND ELECTRICAL CHARATERISTICS

* Rating at 25℃ ambient temperature unless otherwise specified
* Single phase,half wave. 60Hz, resistive or inductive load.
* For capacitive load derate current by 20 %

Characteristic	Symbol	GBU6A	GBU6B	GBU6D	GBU6G	GBU6J	GBU6K	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	50	100	200	400	600	800	V
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	V
Average Rectifier Forward Current @ T_C=100℃	$I_{O(AV)}$	6.0						A
Non-Repetitive Peak Surge Current 8.3 ms Single half sine-wave superimposed on rated load	I_{FSM}	175						A
Forward Voltage (per element) (I_F =2.0 Amp)	V_{FM}	1.0						V
Peak Reverse Current (Rated DC Voltage, T_C = 25℃) (Rated DC Voltage, T_C = 100℃)	I_R	5.0 500						uA
I^2t Rating for Fusing(t<8.35MS)	I^2t	127						A^2s
Typical Thermal Resistance (per leg)(note 1)	$R_{\theta jA}$	8.6						k/W
Typical Thermal Resistance (per leg)(note 2)	$R_{\theta jc}$	3.1						k/W
Operating and Storage Temperature Range	T_J , T_{stg}	-65 to +150						℃

Note: 1.Thermal resistance junction to ambient, mounted on PCB at 9.5mm lead length with 12 mm^2 copper pads.
2.Thermal resistance junction to case, mounted on 5.0×4.0×0.8 cm thick AL plate.

GBU6A thru GBU6K

FIG-1 FORWARD CURRENT DERATING CURVE

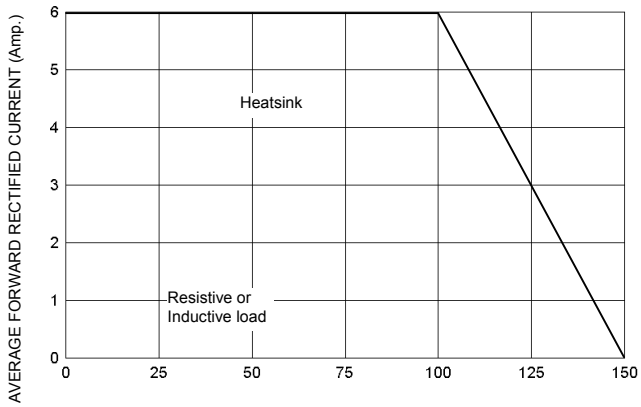


FIG-2 TYPICAL FORWARD CHARACTERISITICS

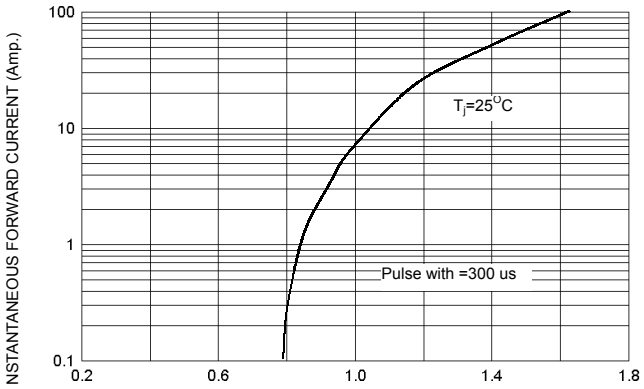


FIG-3 PEAK FORWARD SURGE CURRENT

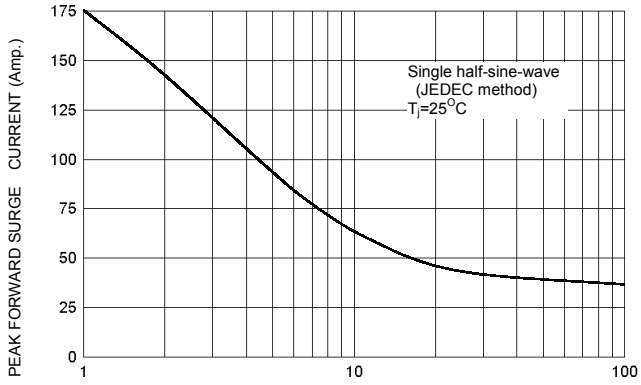


FIG-4 TYPICAL JUNCTION CAPACITANCE