DACO SEMICONDUCTOR CO., LTD.

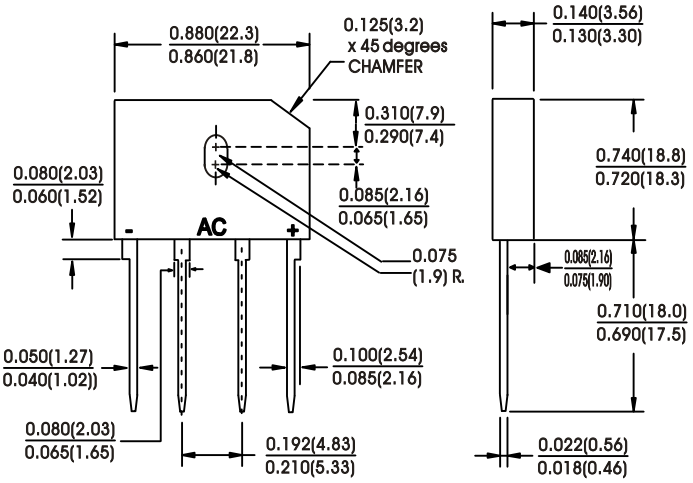
GBU15A THRU GBU15M

GLASS PASSIVATED SINGLE PHASE RECTIFIER

GBU

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- High case dielectric strength of 1500 V_{RMS}
- Ideal for printed circuit boards
- Glass passivated chip junction
- High surge overload rating
- High temperature soldering guaranteed: 260℃/10 seconds 0.375" (9.5mm) lead Length



Dimensions in inches and (millimeters)

MECHANICAL DATA

Case: Molded plastic body over passivated junctions
Terminals: Plated leads solderable per MIL-STD-750, Method 2026
Mounting Position: Any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25° C ambient temp. unless otherwise specified.
Single phase, half sine wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20 %.

Characteristic	Symbol	GBU 15A	GBU 15B	GBU 15D	GBU 15G	GBU 15J	GBU 15K	GBU 15M	Units
Maximum recurrent peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC voltage	VDC	50	100	200	400	600	800	1000	Volts
Maximum average forward rectified current at Tc=100℃ (NOTE 1)	Io	15.0							Amps
Peak forward surge current, 8.3ms single half sine-wave auperimposed on rated load (JEDEC Methed)	I_{FSM}	240.0							Amps
Maximum instantaneous forward voltage drop per leg at 15.0A (Per leg)	V_F	1.1							Volts
Maximum DC reverse current at rated DC blocking voltage (Per leg) Ta=25°C / Ta=125°C	I_R	5.0 / 500							μA
Typical junction (Per leg)(NOTE 2)	C_J	80.0							PF
Typical thermal resistance (Per leg)(NOTE 1)	R_{th} JC	2.2							°C/W
Operating Junction and storage temperature range	T_J, Tstg	-55 to+150							°C

NOTES:
(1)Device mounted on 100mm x 100mm x 1.6mm Cu plate heatsink
(2)Measured at 1.0MHZ and applied reverse of 4.0Volts
(3)Recommended mounted position is bolt to down on heatsink with silicone thermal compound for maximum heat transfer with #6 screws
(4)Units mounted in free air,no heat on P.C.B. 0.5 x 0.5"(12X12mm)copper pads,0.375"(9.5mm) lead length

RATINGS AND CHRACTERISTIC CURVES

FIG.1-DERATIVE CURVE FOR OUTPUT RECTIFIER CURRENT

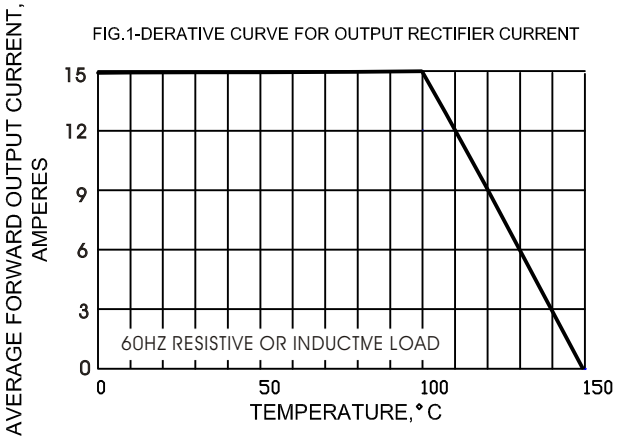


FIG. 2 - MAXIMUN NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

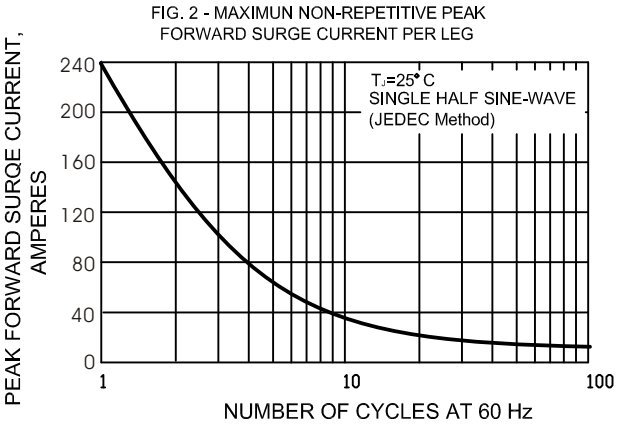


FIG.3-TYPICAL FORWARD CHARACTERISTICS PER LEG

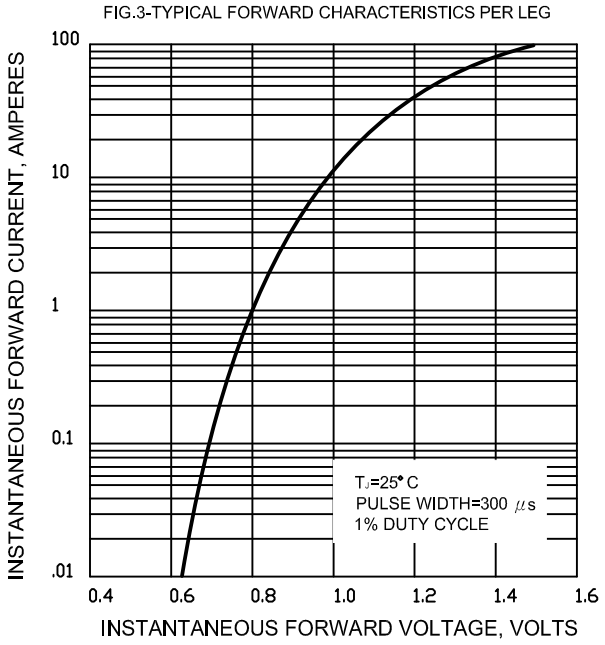
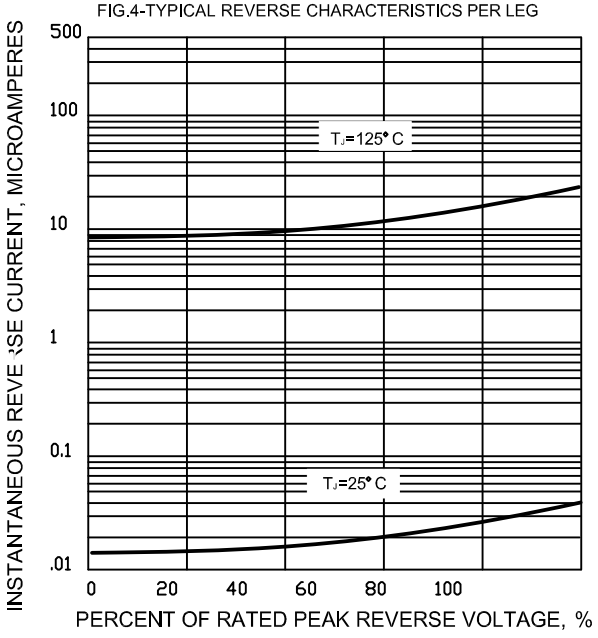


FIG.4-TYPICAL REVERSE CHARACTERISTICS PER LEG



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