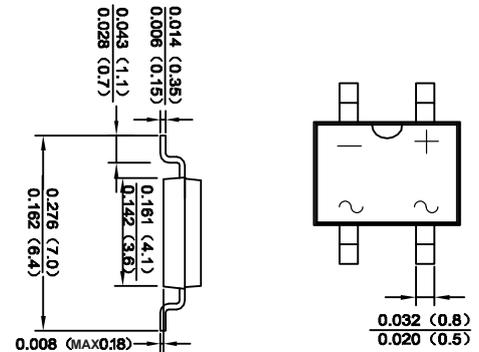


SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIERS

Features

- ◆ Glass passivated die construction
- ◆ Low forward voltage drop
- ◆ High current capability
- ◆ High surge current capability
- ◆ Designed for surface mount application
- ◆ Plastic material-UL flammability 94V-0



Mechanical Data

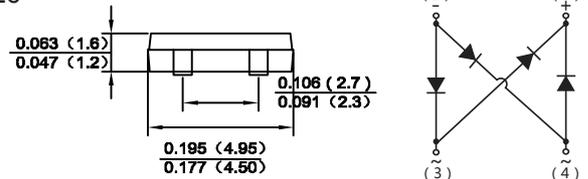
Case : JEDEC MBF Molded plastic body

Terminals : Solder plated, solderable per MIL-STD-750, Method 2026

Polarity : Polarity symbol marking on body

Mounting Position : Any

Weight : 0.0026 ounce, 0.075 grams



Maximum Ratings And Electrical Characteristics

Dimensions in inches and (millimeters)

Ratings at 25 °C ambient temperature unless otherwise specified.

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

Parameter	SYMBOLS	MDD MB2F	MDD MB4F	MDD MB6F	MDD MB8F	MDD MB10F	UNITS
Marking Code							
Maximum repetitive peak reverse voltage	V_{RRM}	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	200	400	600	800	1000	V
Maximum average forward rectified current at $T_C=125^{\circ}C$	$I_{F(AV)}$	1.0					A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	35					A
Maximum instantaneous forward voltage drop per leg at 0.5A	V_F	1.1					V
Maximum DC reverse current at rated DC blocking voltage	I_R	5 40					μA mA
Typical junction capacitance (NOTE1)	C_J	13					pF
Typical thermal resistance (NOTE2)	$R_{\theta JA}$ R_{JC}	80 25					$^{\circ}C/W$
Operating temperature range	T_J	-55 to +150					$^{\circ}C$
storage temperature range	T_{STG}	-55 to +150					$^{\circ}C$

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

2. Mounted on glass epoxy PC board with 4x1.5"x1.5" (3.81x3.81 cm) copper pad.

Ratings And Characteristic Curves

Fig.1 Average Rectified Output Current Derating Curve

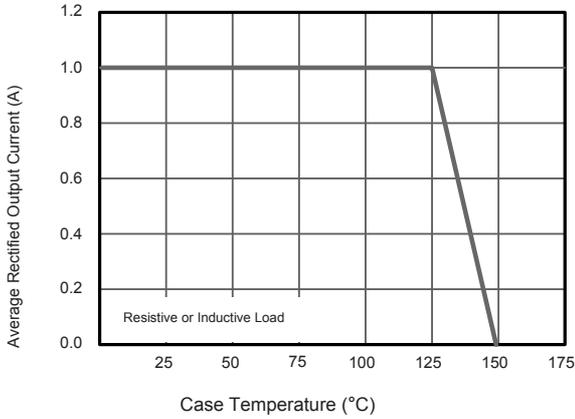


Fig.2 Typical Reverse Characteristics

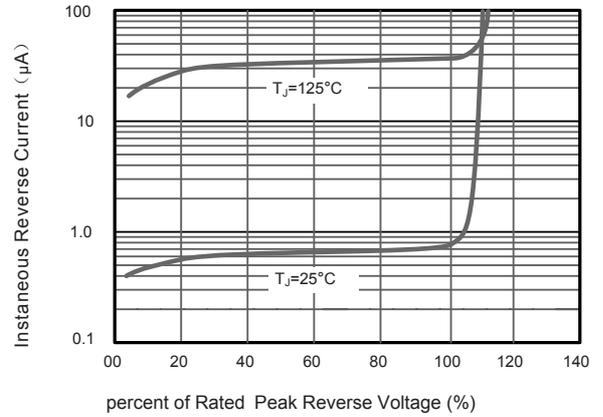


Fig.3 Typical Instantaneous Forward Characteristics T_J=25°C

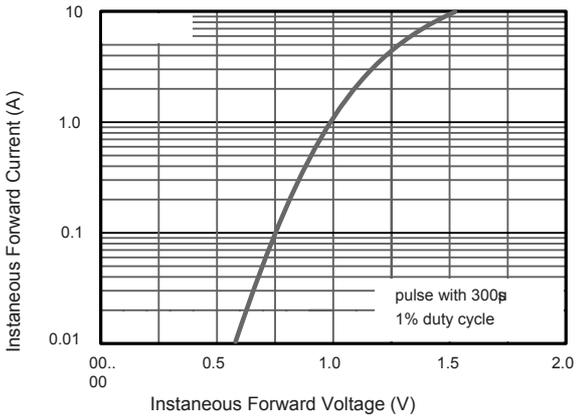


Fig.4 Typical Junction Capacitance

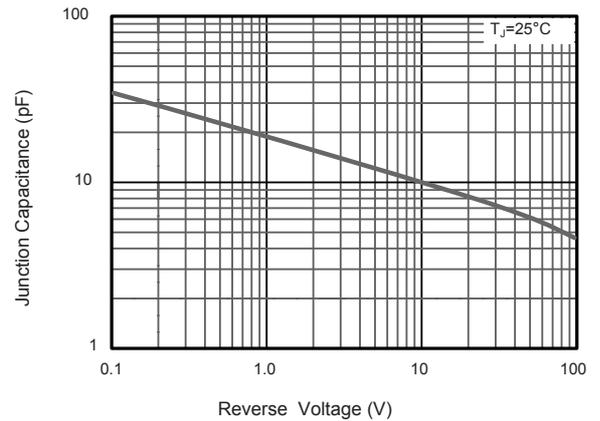
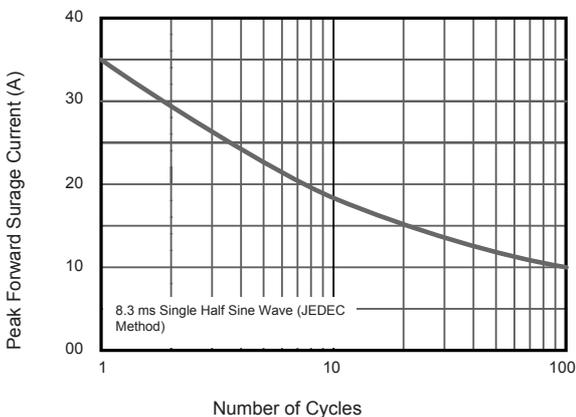
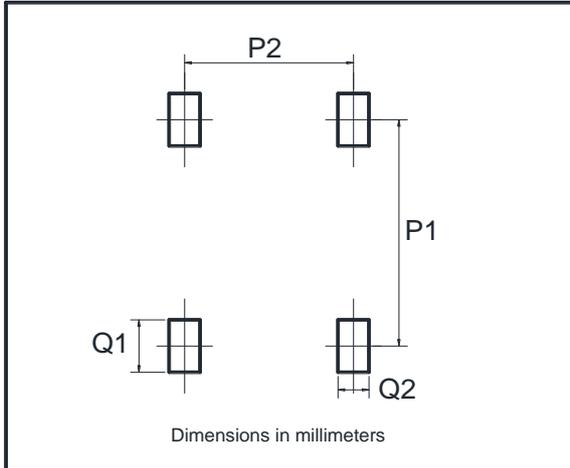


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



The curve above is for reference only.

Suggested Pad Layout



Dim	Min
P1	6.00
P2	2.40
Q1	1.84
Q2	1.20