



UMB2F THRU UMB10F

SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIERS

Voltage Range - 200 to 1000 Volts Current - 0.5/0.8 Ampere

FEATURES

- ◆ Low profile space
- ◆ Ideal for automated placement
- ◆ Glass passivated chip junction
- ◆ Low forward voltage drop
- ◆ Low leakage current
- ◆ High forward surge capability
- ◆ High temperature soldering:
260°C/10 seconds at terminals
- ◆ Component in accordance to
RoHS 2002/95/1 and WEEE 2002/96/EC

MECHANICAL DATA

- **Case:** SOF2-4 Molded plastic over glass passivated chip
- **Terminals:** Solder plated, solderable per J-STD-002B and JESD22-B102D
- **Polarity:** Polarity symbols marked on body

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

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

MDD Catalog Number	SYMBOLS	UMB2F B3	UMB4F B4	UB6F B5	UB8F B6	UMB10F B7	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	200	400	600	800	1000	VOLTS
Maximum RMS voltage	V_{RMS}	140	280	420	560	700	VOLTS
Maximum DC blocking voltage	V_{DC}	200	400	600	800	1000	VOLTS
Maximum average forward rectified current at $T_c=30^\circ\text{C}$ On glass-epoxy P.C.B. On aluminum substrate	$I_{F(AV)}$	0.5 0.8					Amps
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	20					Amps
Maximum instantaneous forward voltage drop per leg at 0.4A	V_F	1.1					Volts
Maximum DC reverse current at rated DC blocking voltage $T_J=25^\circ\text{C}$ $T_J=125^\circ\text{C}$	I_R	5.0 100					μA μA
Thermal resistance from junction to ambient per leg	$R_{\theta JA}^{(1)}$ $R_{\theta JA}^{(2)}$	100 80					$^\circ\text{C}/\text{W}$
Typical thermal resistance per leg	$R_{\theta JL}$	30					$^\circ\text{C}/\text{W}$
Operating temperature range	T_J	-55 to +150					$^\circ\text{C}$
storage temperature range	T_{STG}	-55 to +150					$^\circ\text{C}$

NOTES: 1. On glass epoxy P.C.B. mounted on 0.05x0.05"(1.3x1.3mm) pads

2. On aluminum substrate P.C.B. with on area of 0.8"x0.8"(20x20mm) mounted on 0.05X0.05"(1.3X1.3mm) solder pad



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RATINGS AND CHARACTERISTIC CURVES UMB2F THRU UMB10F

Fig.1 Forward Current Derating Curve

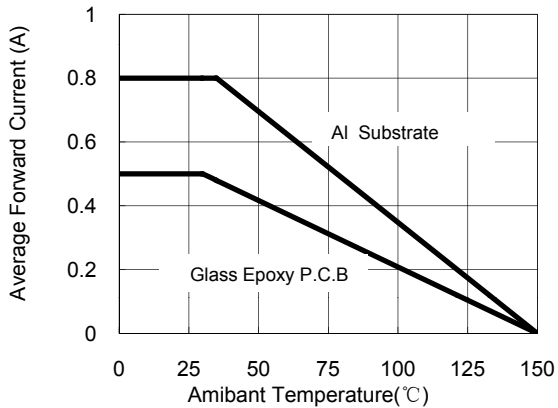


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

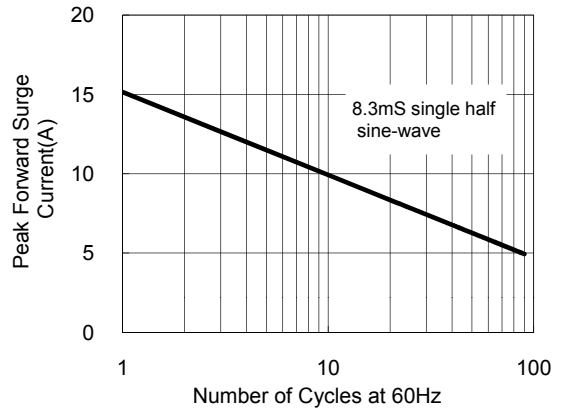


Fig.3 Typical Instantaneous Forward Characteristics

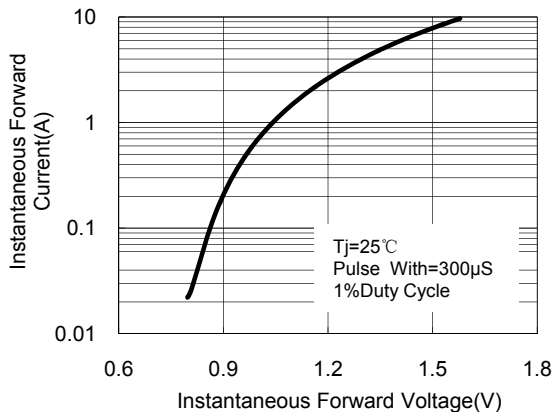
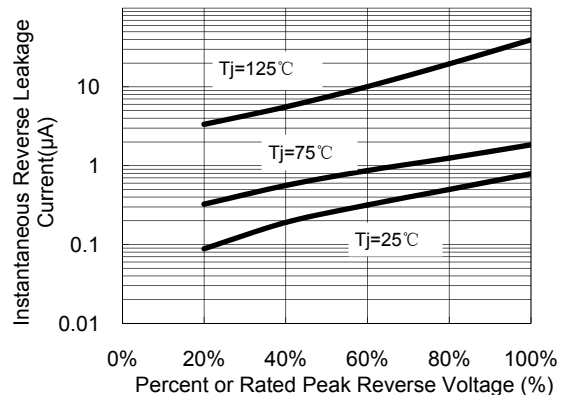


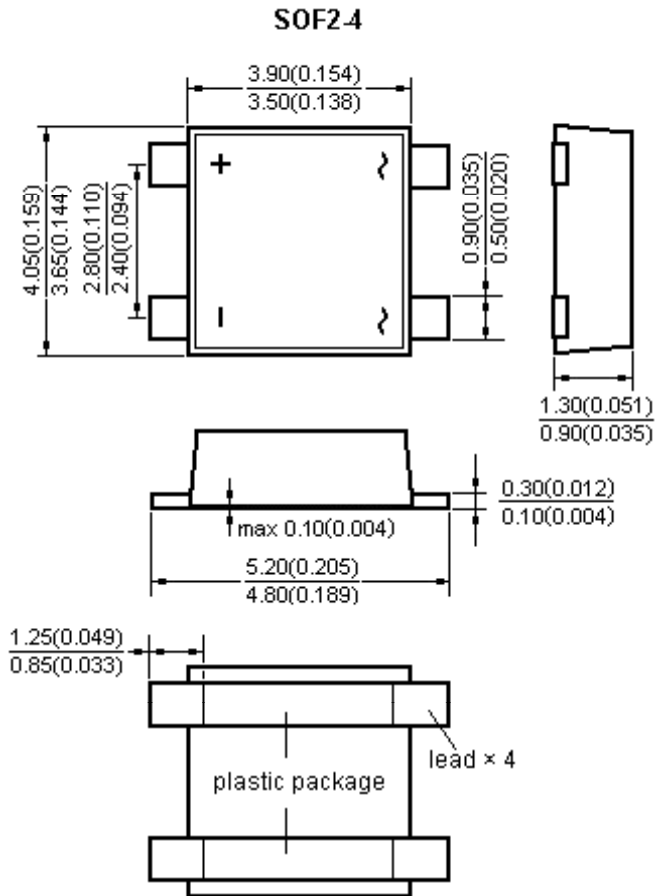
Fig.4 Typical Reverse Leakage Characteristics



The cruve graph is for reference only, can't be the basis for judgment(曲线图仅供参考!)

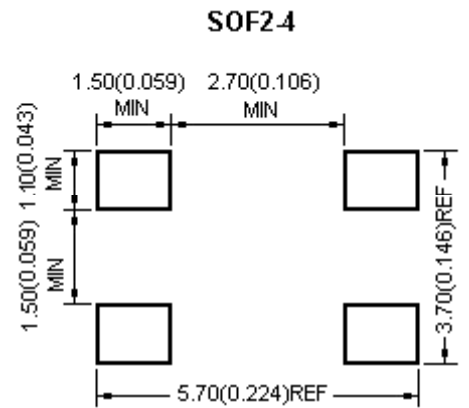


Package Outline



Dimensions in millimeters and (inches)

Soldering Pad



Dimensions in millimeters and (inches)



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