UMB2F THRU UMB10F

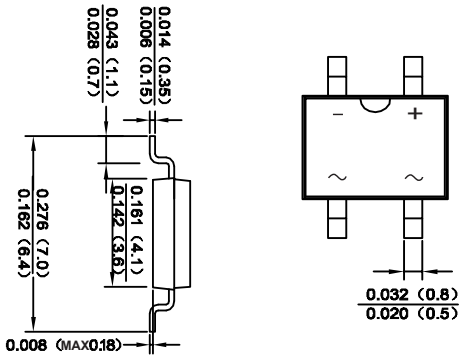
Voltage Range - 200 to 1000 V olts Current - 0.5/0.8 Ampere

GLASS PASSIVATED ULTRA FAST RECOVERY BRIDGE RECTIFIERS

Features

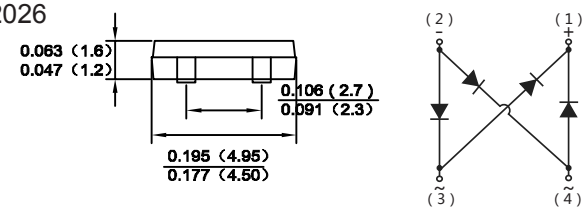
MBF RoHS COMPLIANT

- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- High temperature soldering guaranteed: 260°/10 seconds at 5 lbs., (2.3kg) tension
- Small size, simple installation
- High surge current capability



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 : 0.008 ounce, 0.22 grams



Maximum Ratings And Electrical Characteristics

Dimensions in inches and (millimeters)

Ratings at 25°C ambient temperature unlss otherwise specified.

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

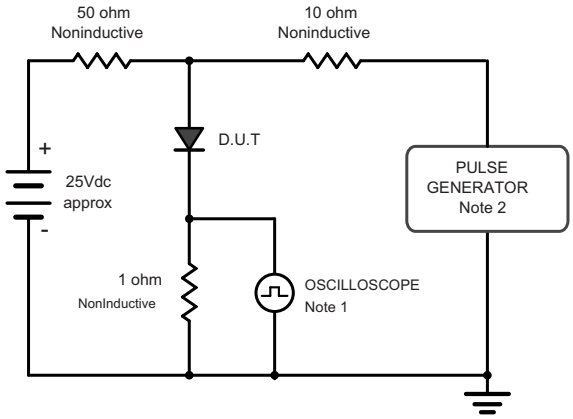
Parameter / Marking Code	SYMBOLS	MDD UMB2F	MDD UMB4F	MDD UMB6F	MDD UMB8F	MDD UMB10F	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	200	400	600	800	1000	V
Maximum average forward rectified current On glass-epoxy P.C.B.(Note1) On aluminum substrate(Note2)	$I_{F(AV)}$	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 1.0A	V_F	1.0	1.3	1.5			V
Maximum DC reverse current T_A=25°C at rated DC blocking voltage T_A=125°C	I_R	5 100					uA
Maximum reverse recovery time Note2	t_{rr}	50		75			nS
Typical Junction Capacitance Note1	C_j	18					pF
Typical thermal resistance Note3	$R\theta_{JL}$ $R\theta_{JA}$	80 25					°C/W
Operating temperature range	T_J	-55 to +150					°C
storage temperature range	T_{STG}	-55 to +150					°C

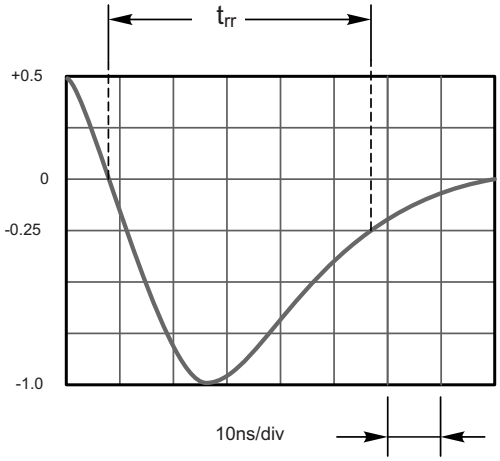
Note: 1. Measured at 1MHz and applied reverse voltage of 4 V D.C.
2. Measured with I_F = 0.5 A, I_R = 1 A, I_{rr} = 0.25 A.
3. Mounted on glass epoxy PC board with 4×1.5"×1.5" (3.81×3.81 cm) copper pad.

DN:T21315A1

Ratings And Characteristic Curves

Fig.1 Reverse Recovery Time Characteristic And Test Circuit Diagram





Set time Base for 10ns/div

Note：1. Rise Time = 7ns, max.
Input Impedance = 1megohm,22pF.
2. Ries Time =10ns, max.
Source Impedance = 50 ohms.

Fig.2 Maximum Average Forward Current Rating

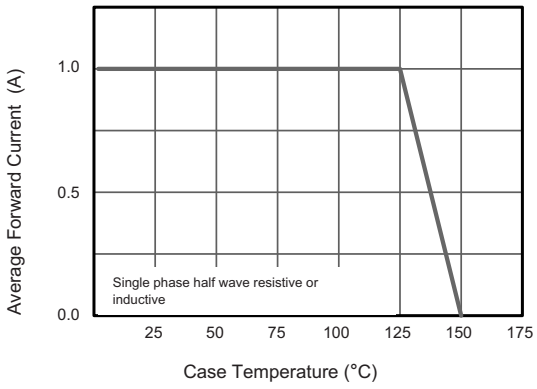


Fig.3 Typical Reverse Characteristics

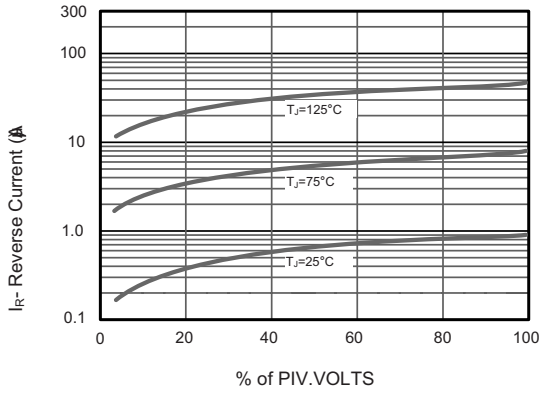


Fig.3 Typical Instaneous Forward Characteristics

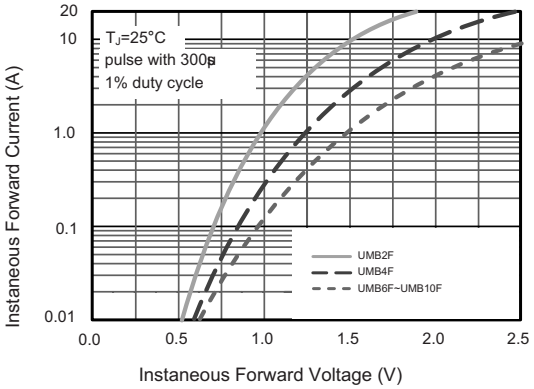
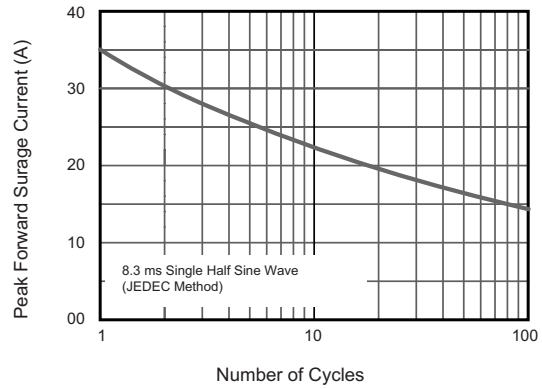
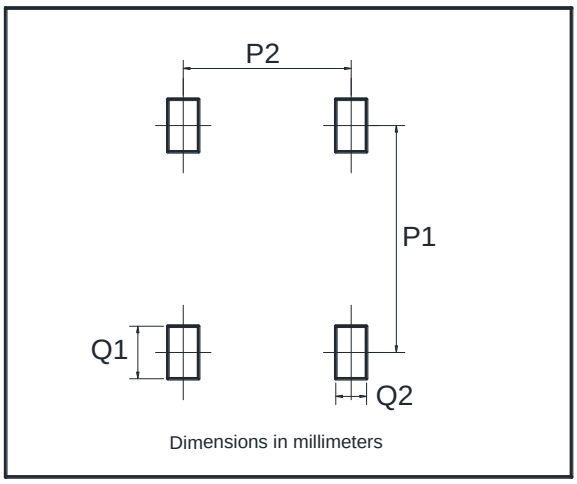


Fig.4 Maximum Non-Repetitive Peak Forward Surage Current



The curve above is for reference only.

Suggested Pad Layout



Dim	Min
P1	6.00
P2	2.40
Q1	1.84
Q2	1.20