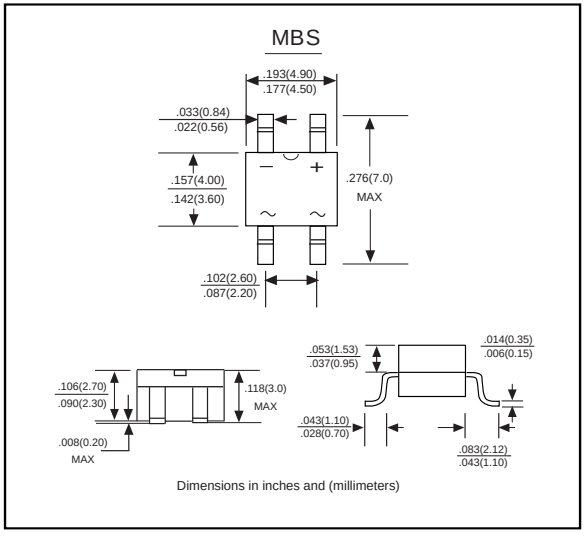
UMB2S THRU UMB10S

200V-1000V 0.5/0.8A

GLASS PASSIVATED ULTRA FAST RECOVERY BRIDGE RECTIFIERS

FEATURES

- 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
- Leads solderable per MIL-STD-202, Method 208
- High surge current capability
- Glass passivated chip junction
- Green compound(halogen&Sb_2O_3 free)



Dimensions in inches and (millimeters)

MECHANICAL DATA

Case: Molded plastic body
Terminals: Plated leads solderable per MIL-STD-750, Method 2026
Polarity: Polarity symbols marked on case
Mounting Position: Any

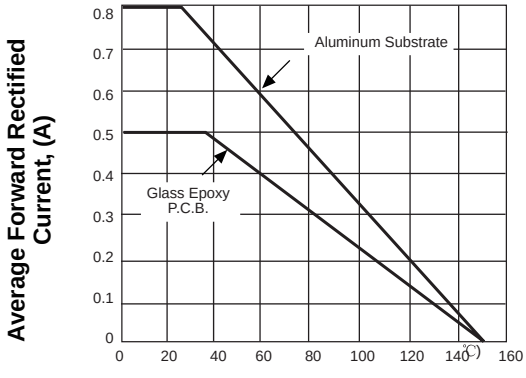
MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	SYMBOLS	UMB2S	UMB4S	UMB6S	UMB8S	UMB10S	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)	$I_{F(AV)}$	0.5 0.8					A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	30					A
Maximum instantaneous forward voltage drop per leg at 0.4A	V_F	1.0	1.4	1.7			V
Maximum DC reverse current T_A=25℃ at rated DC blocking voltage T_A=125℃	I_R	5.0 500					uA uA
Typical thermal resistance(NOTE 3)	$R\theta_{JL}$ $R\theta_{JA}$	28 85					℃/W
Maximum reverse recovery time (NOTE 4)	t_{rr}	50		75			ns
Operating temperature range	T_J	-55 to +150					℃
storage temperature range	T_{STG}	-55 to +150					℃

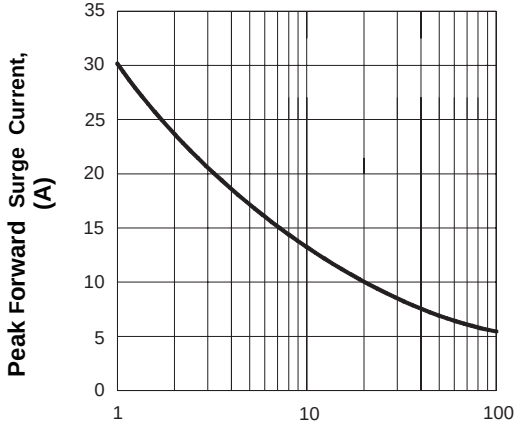
NOTES:1.On glass epoxy P.C.B. mounted on 0.05x0.05"(1.3x1.3mm) pads.
2.On aluminum substrate P.C.B. with an area of 0.8"x0.8"(20x20mm) mounted on 0.05X0.05"(1.3X1.3mm) solder pad.
3.Thermal resistance form junction to ambient and junction to lead mounted on P.C.B. with 0.2X0.2"(5X5mm) copper pads.
4.Reverse recovery condition I_F=0.5A,I_R=1.0A,Irr=0.25A.

FIG.1 FORWARD DERATING CURVE



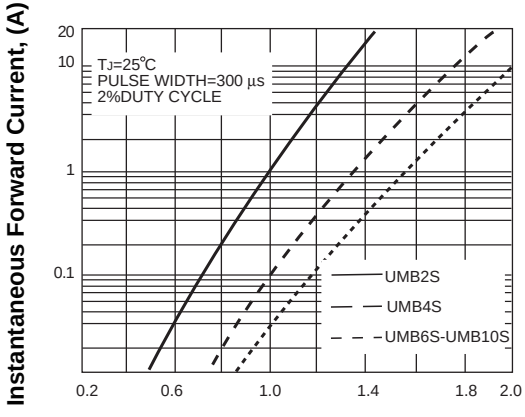
Ambient Temperature, (°C)

FIG.2 PEAK FORWARD SURGE CURRENT



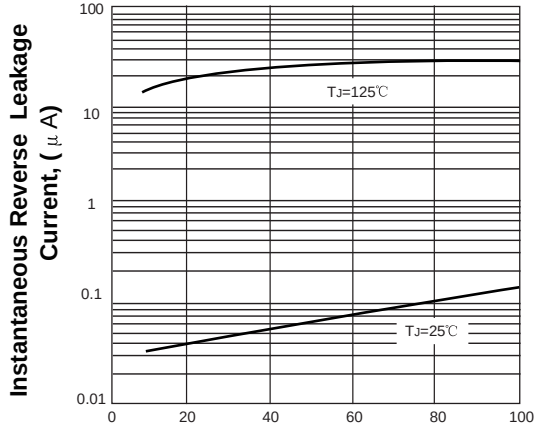
Number Of Cycles At 60Hz

FIG.3 TYPICAL FORWARD CHARACTERISTICS



Instantaneous Forward Voltage, (V)

FIG.4 TYPICAL REVERSE CHARACTERISTICS



Percent Of Rated Peak Reverse Voltage, %