

SINGLE PHASE 4.0AMP FASR RECOVERY BRIDGE

RECTIFIERS

Reverse Voltage - 50 to 1000 V

Forward Current – 4A

FEATURES

- ◆The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆Idea for printed circuit board
- ◆Glass passivated Junction chip
- ◆Low reverse leakage
- ◆High forward surge current capability
- ◆High temperature soldering guaranteed
250°C/10 seconds at terminals

MECHANICAL DATA

- ◆Case : Molded plastic body
- ◆Terminals : Solder plated, solderable per MIL-STD-750,Method 2026
- ◆Polarity : Polarity symbol marking on body
- ◆Mounting Position : Any

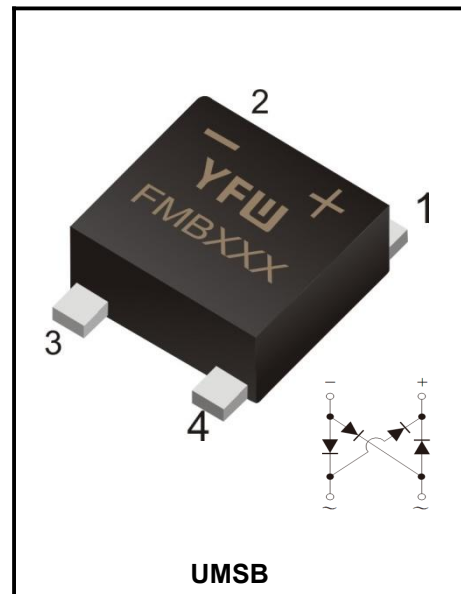
Maximum Ratings And Electrical Characteristics

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

Parameter	Symbols	FMSB 40AD	FMSB 40BD	FMSB 40DD	FMSB 40GD	FMSB 40JD	FMSB 40KD	FMSB 40MD	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified current at $T_L=100\text{ }^{\circ}\text{C}$	$I_{(AV)}$	4.0							A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	150							A
Rating for fusing ($t=8.3\text{ms}$, $T_a=25\text{ }^{\circ}\text{C}$)	I^2_t	93.3							A^2_s
Maximum instantaneous forward voltage at 4.0A	V_F	1.3							V
Maximum DC Reverse Current @ $T_A=25^{\circ}\text{C}$ at Rated DC Blocking Voltage @ $T_A=125\text{ }^{\circ}\text{C}$	I_R	5.0 500							μA
Maximum Reverse Recovery Time (Note1)	T_{rr}	150				250	500		nS
Typical Junction Capacitance (Note1)	C_j	68.0							pF
Typical Thermal Resistance	R_{qJA}	55.0							$^{\circ}\text{C/W}$
Operating junction and storage temperature range	T_j, T_{stg}	-55 ~ +150							$^{\circ}\text{C}$

Note:1.Reverse recovery time test condition: $I_F=0.5\text{A}$ $I_R=1.0\text{A}$ $I_{rr}=0.25\text{A}$

2.Measured at 1MHz and applied reverse voltage of 4.0V D.C.



Ratings And Characteristic Curves

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

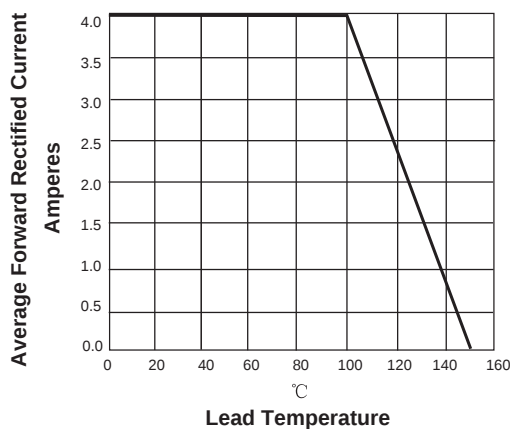


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

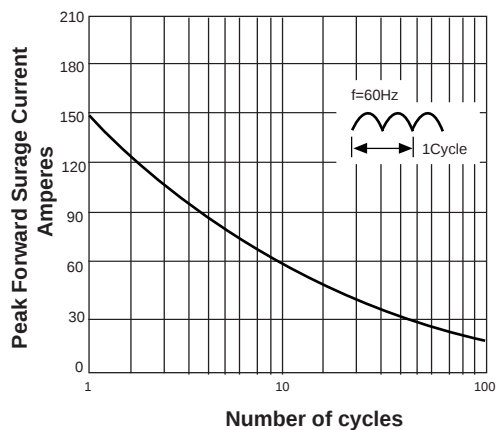


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

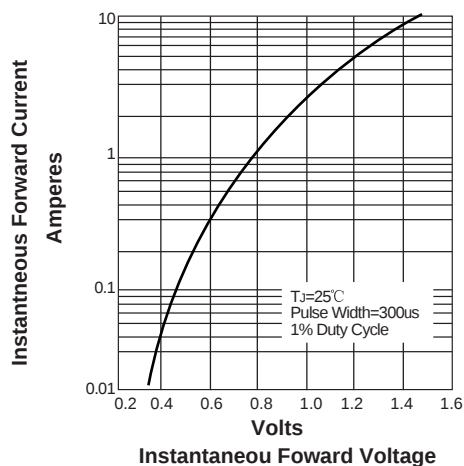
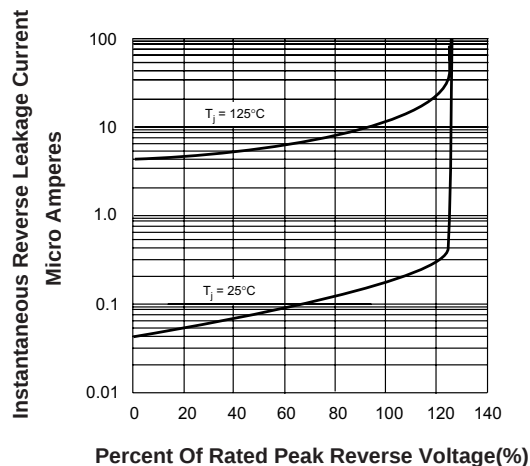
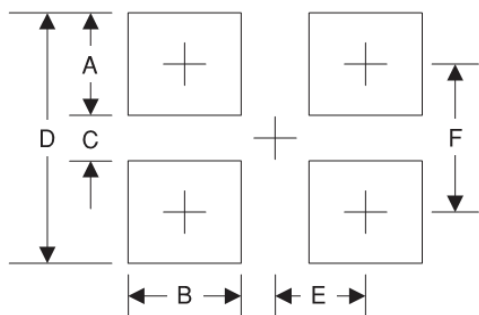


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS



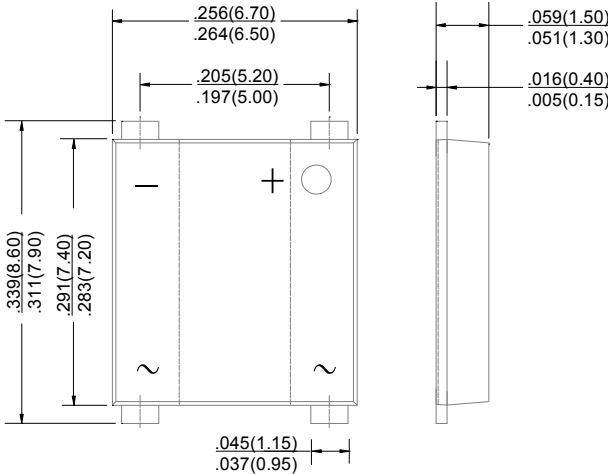
Suggested Pad Layout



Symbol	Unit (mm)	Unit (inch)
A	1.8	0.071
B	2.0	0.078
C	5.50	0.216
D	9.15	0.360
E	2.6	0.102
F	7.35	0.289

Package Outline

UMSB



Summary of Packing Options

Package	Packing Description	Packing Quantity	Industry Standard
UMSB	Tape/Reel,13"reel	3 000	EIA-481-1