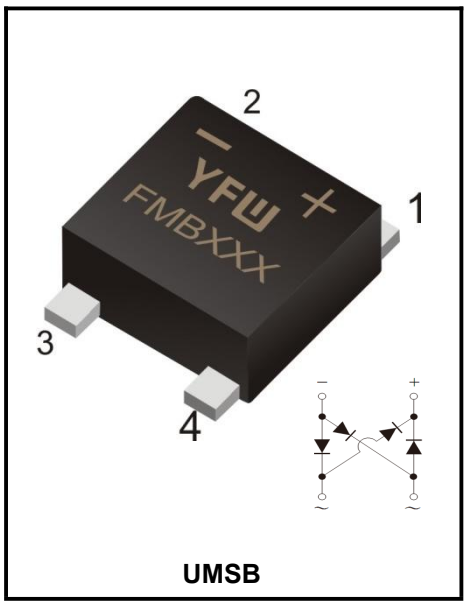
SINGLE PHASE 4.0AMP FASR RECOVERY BRIDGE RECTIFIERS

Reverse Voltage - 50 to 1000 V

Forward Current – 4A



UMSB

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 °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=8.3ms, Ta=25 °C)	I^2t	93.3							A^2s
Maximum instantaneous forward voltage at 4.0A	V_F	1.3							V
Maximum DC Reverse Current @TA=25°C at Rated DC Blocking Voltage @TA=125 °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							°C/W
Operating junction and storage temperature range	T_j, Tstg	-55 ~ +150							°C

Note:1.Reverse recovery time test condition: IF=0.5A IR=1.0A Irr=0.25A

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

Ratings And Characteristic Curves

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

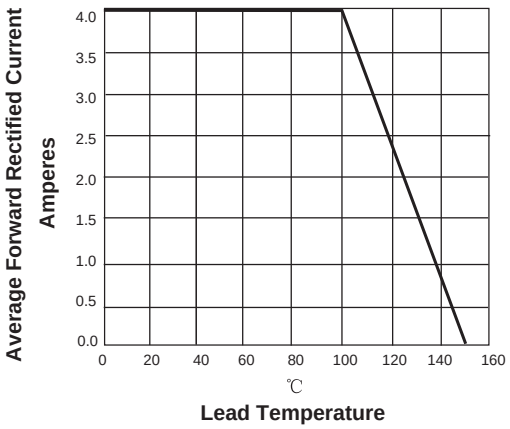


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PERLEG

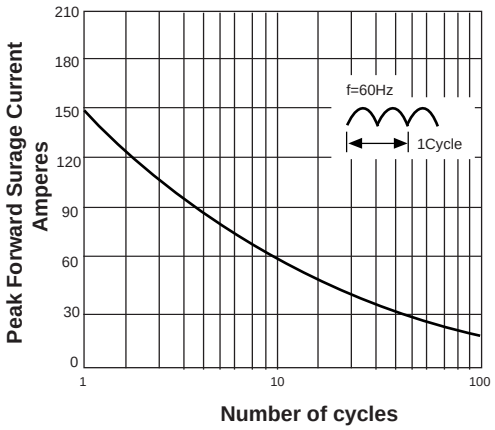


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

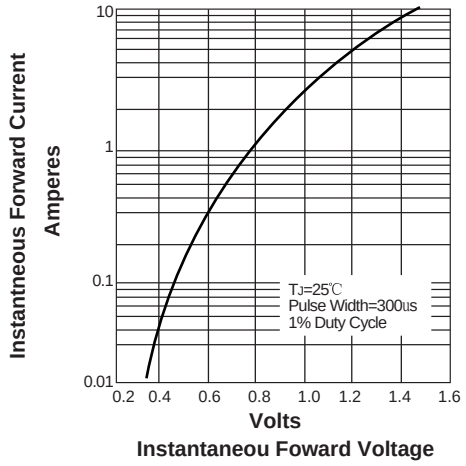
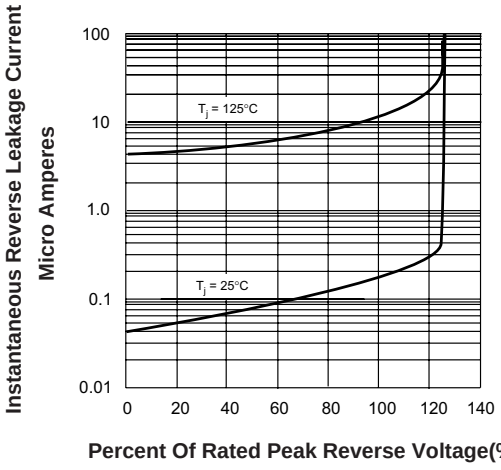
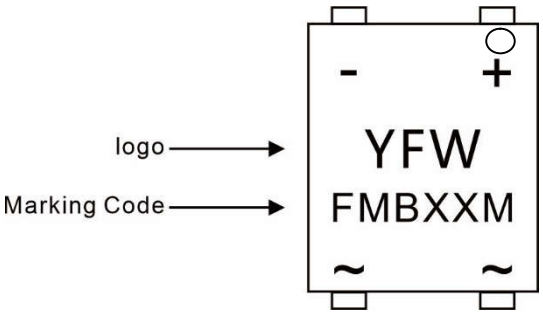


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS



Marking Diagram

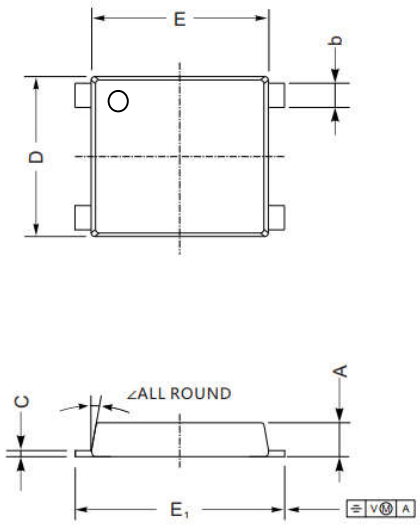


Ordering information

Package	Packing Description	Packing Quantity
UMSB	Tape/Reel,13"reel	3000PCS/Reel 30000PCS/Carton

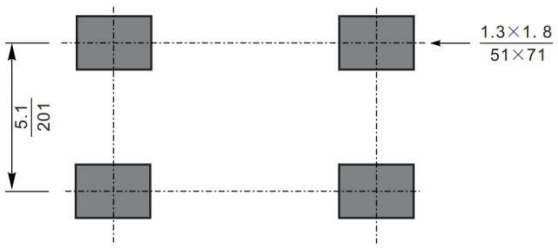
Package Dimensions

UMSB



Dim.	Millimeter(mm)		(mil)	
	Min.	Max.	Min.	Max.
A	1.3	1.5	51	59
C	0.17	0.29	7	12
D	6.2	7.0	244	276
E	7.1	7.6	280	299
E_1	8.4	8.9	331	350
L	1.0	1.6	31.5	55
e	4.9	5.3	193	209
b	0.95	1.15	37	45
∠	10°			

The recommended mounting pad size



Unit: mm (mil)

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