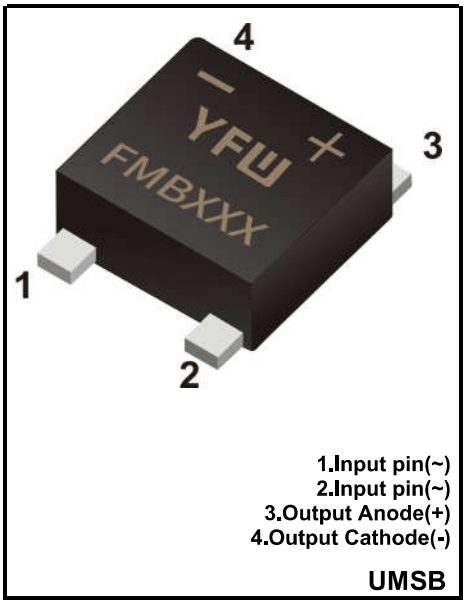
SINGLE PHASE 5.0AMP FASR RECOVERY BRIDGE RECTIFIERS

Reverse Voltage - 1000 V

Forward Current - 5A



1.Input pin(~)
2.Input pin(~)
3.Output Anode(+)
4.Output Cathode(-)

UMSB

FEATURES

- Case: UMSB
- For surface mounted applications
- Ideal for automated placement
- High forward surge current capability
- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- High temperature soldering guaranteed 260°C/10 seconds at terminals

APPLICATION

General purpose use in AC/DC bridge full wave rectification for power supply,lighting ballast,battery charger,home appliances, office euipment and telecommunication applications.

Marking Code	
FMSB50MD	YFW FMB50M

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	FMSB50MD	Units
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	1000	V
Maximum RMS voltage		V_{RMS}	700	V
Maximum DC Blocking Voltage		V_{DC}	1000	V
Maximum average forward rectified current at T_L=120 °C		$I_{(AV)}$	5.0	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 5.0A		V_F	1.3	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	@TA=25°C @TA=125 °C	I_R	2.0 100	μA
Maximum Reverse Recovery Time （Note1）		T_{rr}	500	nS
Typical Junction Capacitance（Note1）		C_j	31	pF
Typical Thermal Resistance （Note2）		R_{qJA} R_{qJC}	65 18	°C/W
Operating junction temperature range		T_J	-55 ~ +150	°C
Storage temperature range		T_{STG}	-55 ~ +150	°C

Note:
1.Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2.Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.3" x 0.3" (8.0 mm x 8.0 mm) copper pad areas

Ratings And Characteristic Curves

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

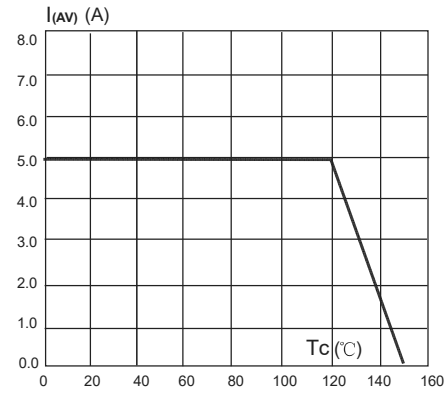


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PERLEG

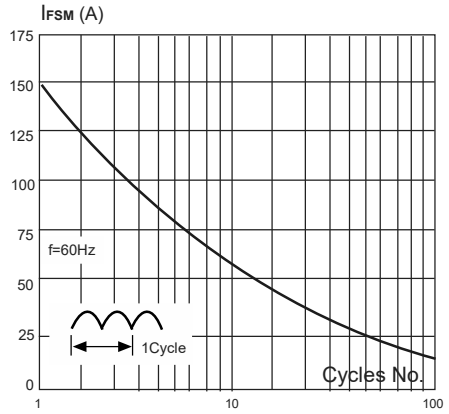


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

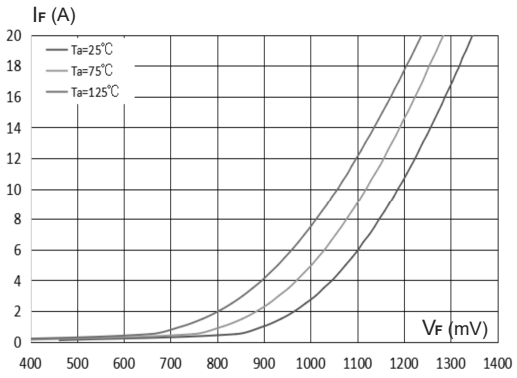
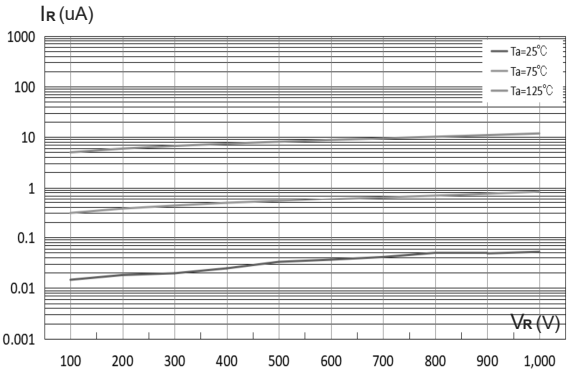
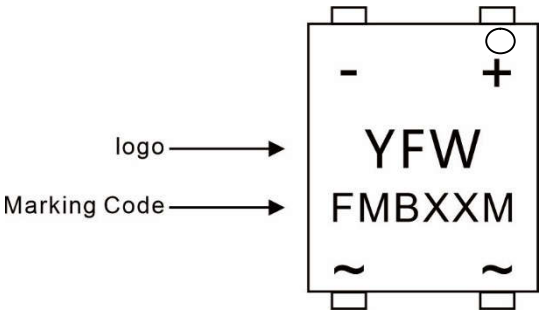


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS



Marking Diagram

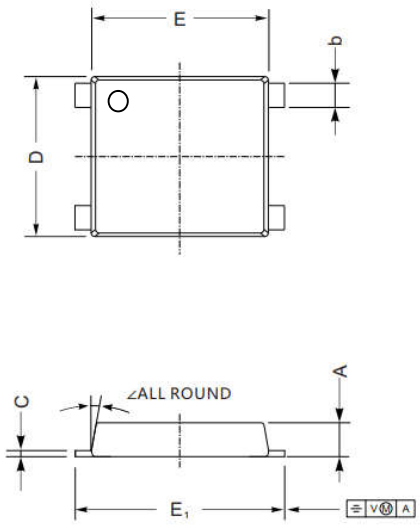


Ordering information

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

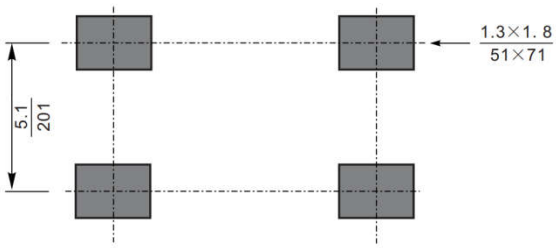
Package Dimensions

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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