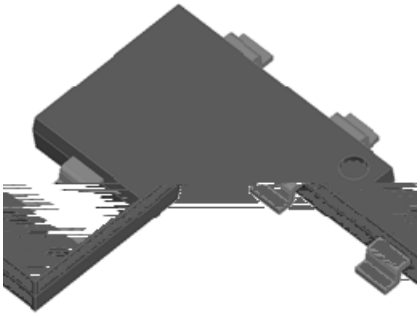
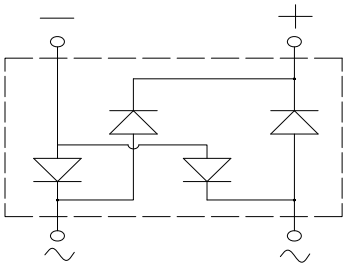
Super Fast Recovery Bridge Rectifiers





Features

- UL recognition, file #E313149
- Glass passivated chip junction
- Ideal for automated placement
- High surge current capability
- Meets MSL level 1, per J-STD-020, LF maximum peak of 260 °C

Typical Applications

General purpose use in AC/DC bridge full wave rectification for SMPS, lighting ballaster, adapter, battery charger, home appliances, office equipment, and telecommunication applications.

Mechanical Data

- **Package**: YBS3 l' : Tinplated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** As marked on body

■Maximum Ratings (T_a=25 Unless otherwise specified

PARAMETER	SYMBOL	UNIT	EYBSM8006
Device marking code			EYBSM8006
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	V	600
Maximum RMS Voltage	V_{RMS}	V	420
Maximum DC blocking Voltage	V_{DC}	V	600
Average rectified output current @60Hz sine wave, R-load, Tc=90	I_O	A	8.0
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave,1 cycle, Tj=25	I_{FSM}	A	150
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, Tj=25			300
Current squared time @1ms≤t≤8.3ms Tj=25 , Rating of per diode	I^2t	A^2S	93.4
Storage temperature	T_{stg}		-55 ~ +150
Junction temperature	T_j		-55 ~ +150

■Electrical Characteristics T_a=25 Unless otherwise specified

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	EYBSM8006
Maximum reverse recovery time	Trr	ns	IF=0.5A,IR=1.0A, IRR=0.25A	35
Maximum instantaneous forward voltage drop per diode	V_F	V	I_{FM}=4.0A	1.7
Maximum DC reverse current at rated DC blocking voltage per diode	I_R	μA	T_j=25	5
			T_j=125	100
Typical junction capacitance	Cj	pF	Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	60

■Thermal Characteristics T_a=25 Unless otherwise specified

PARAMETER		SYMBOL	UNIT	EYBSM8006
Thermal Resistance	Between Junction and Ambient	$R_{\theta J-A}$	/W	55
	Between Junction and Lead	$R_{\theta J-L}$		15
	Between Junction and Case	$R_{\theta J-C}$		6

Note: Device mounted on P.C.B with 35mm*25mm*1.7mm

■Ordering Information (Example)

PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIIMUM

■ Outline Dimensions

YBS3		
Dim	**Min**	**Max**
A	10.00	10.40
B	9.70	10.10
C	6.80	7.20
D	1.3	1.5
E	1.4	1.8
F	0.5	1.1
G	0	0.15

■ Suggested pad layout

Disclaimer

The information presented in this document is for reference onl