



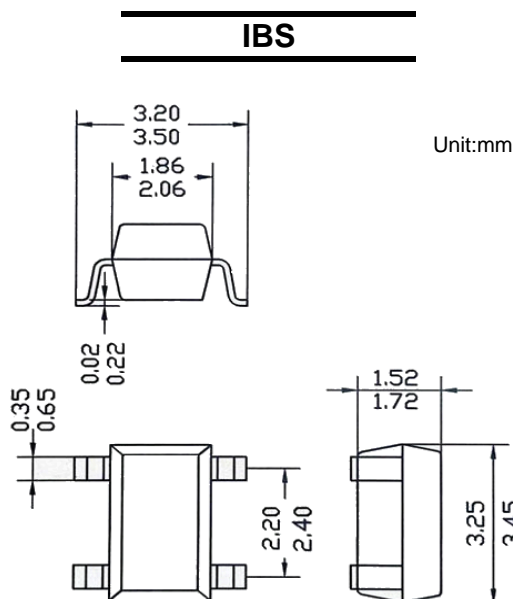
VMB05S THRU VMB10S SURFACE MOUNT BRIDGE RECTIFIERS

FEATURES

- Low profile package
- Glass Passivated Chip Junction
- Easy to pick and place
- High forward surge capability
- High temperature soldering : 260°C/10 seconds at terminals
- Lead free in comply with EU ROHS 2011/65/EU directives

Mechanical Data

- **Case :** IBS
- **Terminals :** Solder plated, solderable per MIL-STD-750, Method 2026
- **Polarity :** Cathode line denotes the cathode end
- **Mounting Position :** Any



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

CHARACTERISTICS	SylBols	VMB05S	VMB1S	VMB2S	VMB4S	VMB6S	VMB8S	VMB10S	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Bridge Input 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	$I_{(AV)}$	0.5							A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	I_{FSM}	25							A
I^2T Rating for Fusing ($t < 8.3ms$)	I^2T	2.59							A^2s
Maximum Forward Voltage at 0.5A	V_F	1.0							V
Maximum DC Reverse Current $T_A=25^\circ C$	I_R	5.0							μA
at Rated DC Blocking Voltage $T_A=125^\circ C$		500							μA
Typical Junction Capacitance ($V_R=4.0V, f=1MHz$)	C_J	13							pF
Typical Thermal Resistance	$R_{\theta JA}$	60							$^\circ C/W$
Operating Temperature Range	T_J	-55 to +150							$^\circ C$
Storage Temperature Range	T_{STG}	-55 to +150							$^\circ C$



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Characteristic Curves ($T_A=25^\circ\text{C}$ unless otherwise noted)

Fig.1 Forward Current Derating Curve

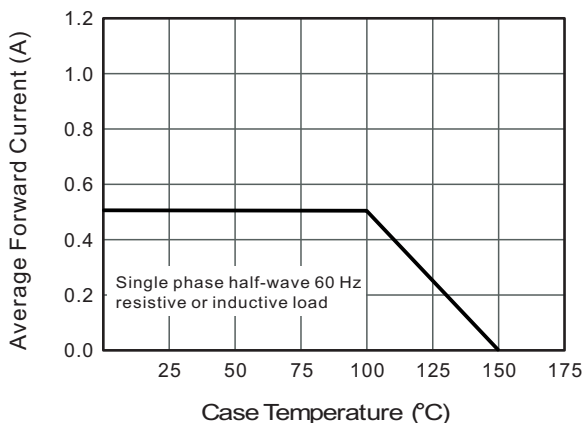


Fig.2 Typical Reverse Characteristics

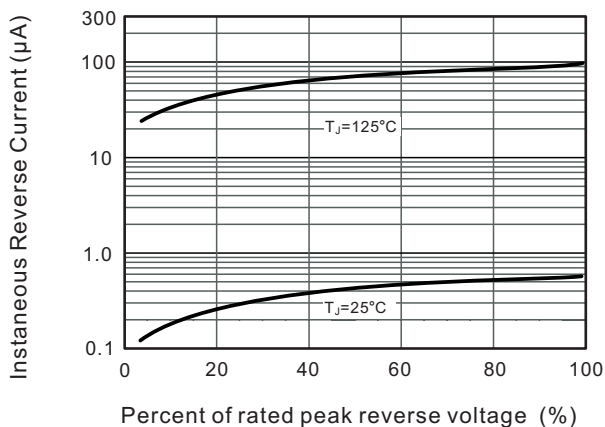


Fig.3 Typical Forward Characteristic

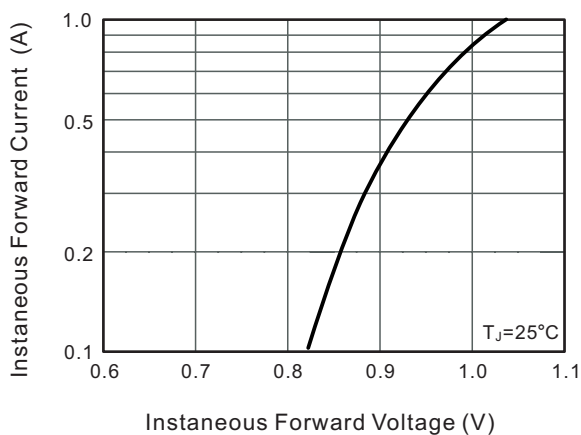
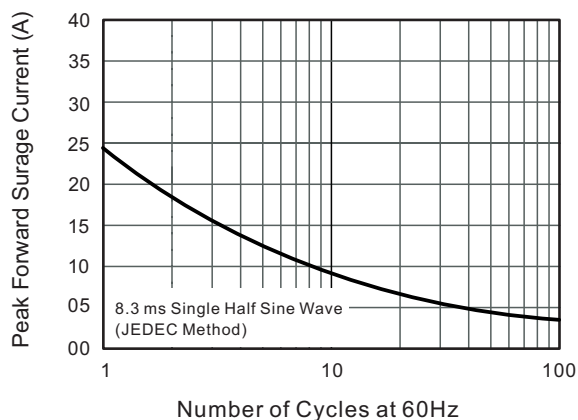
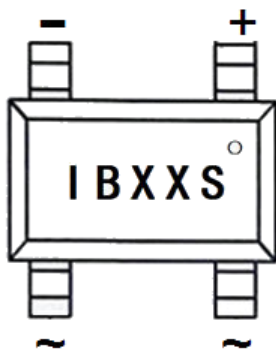


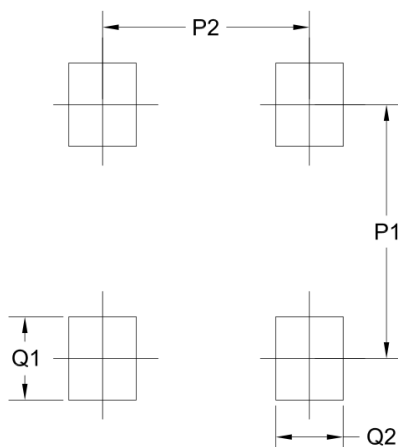
Fig.4 Maximum Non-Repetitive Peak Forward Surge Current



Marking information



The recommended mounting pad size



Unit:mm

代码 Symbol	最小 Min
P1	2.8
P2	2.3
Q1	0.95
Q2	0.75