

SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIERS

Voltage Range - 200 to 1000 Volts Current - 0.5/0.8 Ampere

Features

- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- High temperature soldering guaranteed: 260°C/10 second at 5 lbs., (2.3kg) tension
- Small size, simple installation
- High surge current capability
- Glass passivated chip junction
- Glass compound (halogen&Sb₂O₃ free)

Mechanical Data

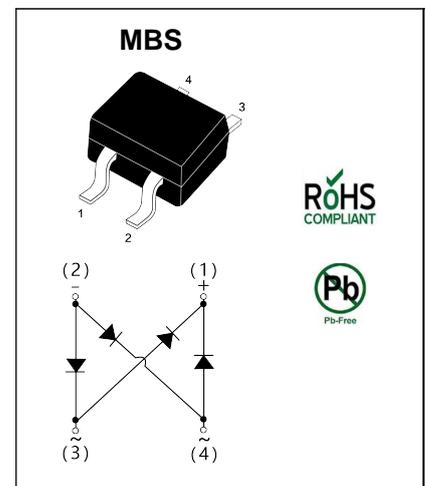
- Case: Molded plastic body
- Terminals: Plated lead solderable per MIL-STD-750, Method 2026
- Polarity: Polarity symbols marked on case
- Mounting Position: Any

Specification

Maximum Rating And Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

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



	SYMBOLS	MB2S	MB4S	MB6S	MB8S	MB10S	UNITS
Maximum repetitive peak reverse voltage	V _{RRM}	200	400	600	800	1000	V
Maximum RMS voltage	V _{RMS}	140	280	420	560	700	V
Maximum DC blocking voltage	V _{DC}	200	400	600	800	1000	V
Maximum average forward rectified current On glass-epoxy P.C.B.(Note1) On aluminum substrate(Note2)	I _{F(AV)}			0.5 0.8			A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I _{FSM}			30			A
Maximum instantaneous forward voltage drop per leg at 0.4A	V _F			1.0			V
Maximum DC reverse current T _A =25°C at rated DC blocking voltage T _A =100°C	I _R			5 100			uA uA
Typical thermal resistance(NOTE 3)	R _{θJL} R _{θJA}			28 85			°C/W
Operating temperature range	T _J			-55 to +150			°C
storage temperature range	T _{STG}			-55 to +150			°C

NOTES:1.On glass epoxy P.C.B. mounted on 0.05x0.05"(1.3x1.3mm) pads
2.On aluminum substrate P.C.B. with an area of 0.8"x0.8"(20x20mm) mounted on 0.05X0.05"(1.3X1.3mm) solder pad
3.Thermal resistance from junction to ambient and junction to lead mounted on P.C.B. with 0.2X0.2"(5X5mm) copper pads.

Ratings and characteristic curves MB2S thru MB10S

FIG.1 FORWARD DERATING CURVE

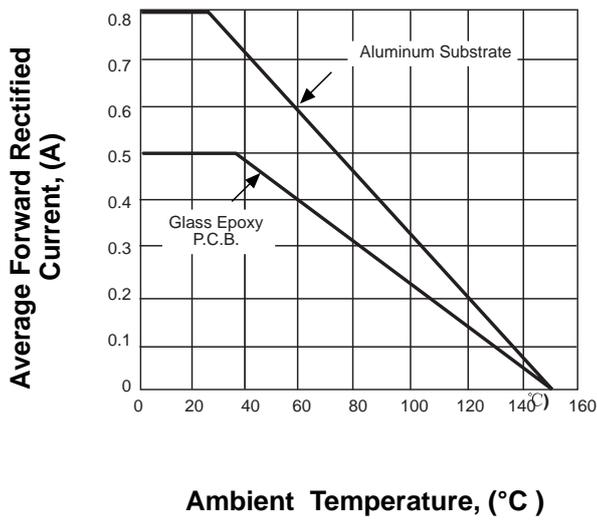


FIG.2 PEAK FORWARD SURGE CURRENT

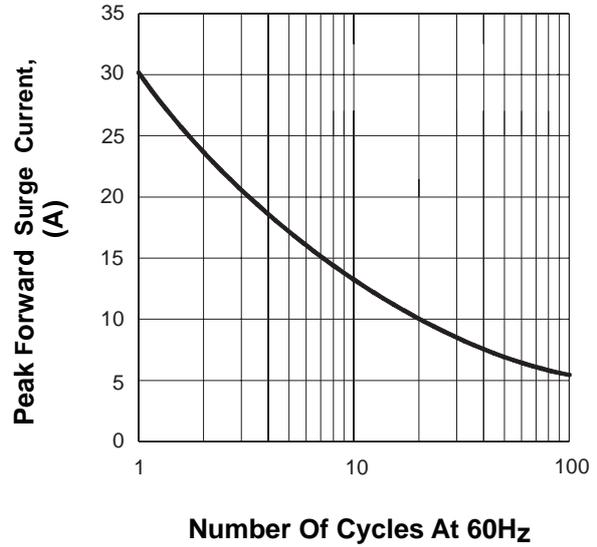


FIG.3 TYPICAL FORWARD CHARACTERISTICS

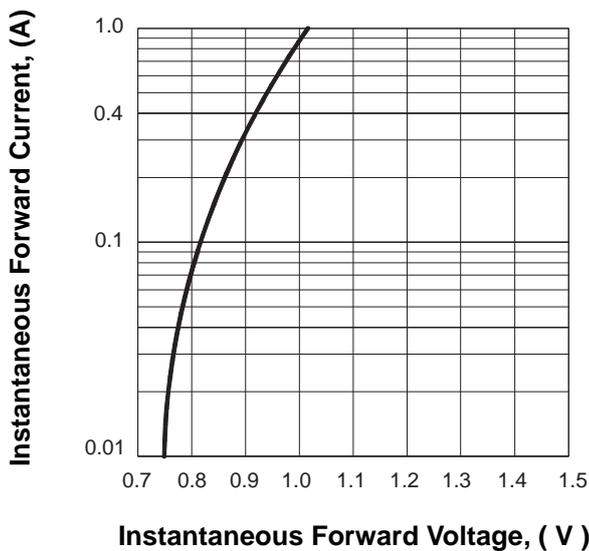
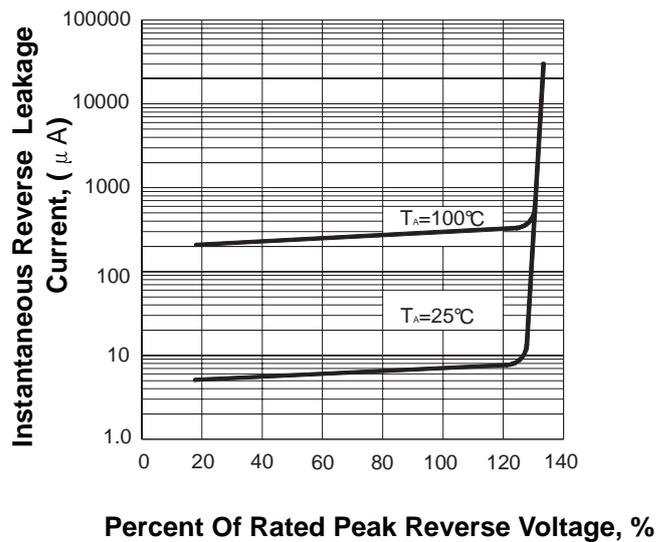
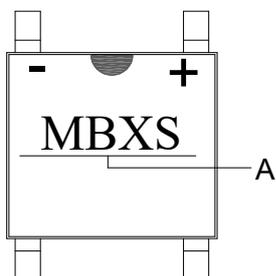


FIG.4 TYPICAL REVERSE CHARACTERISTICS

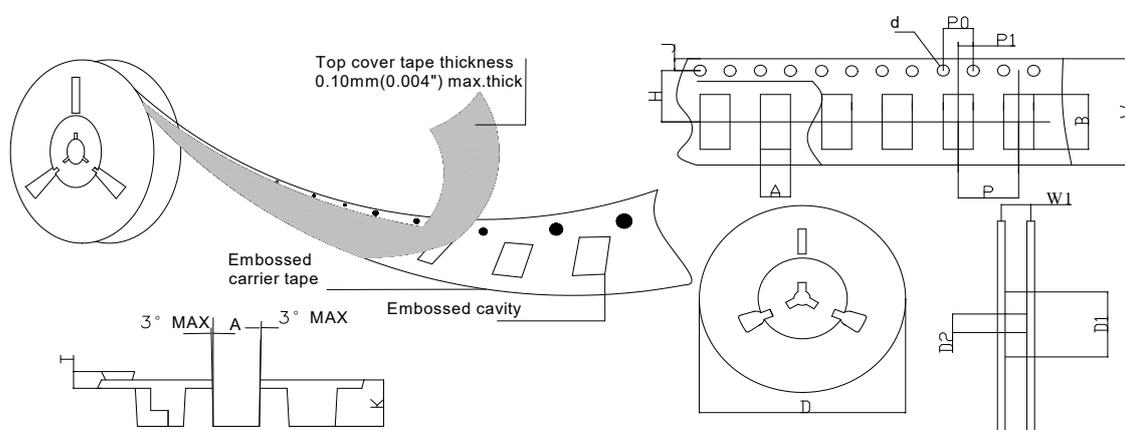


1、Marking



SYMBOL	Explanation
A	Product Name

2、Packaging

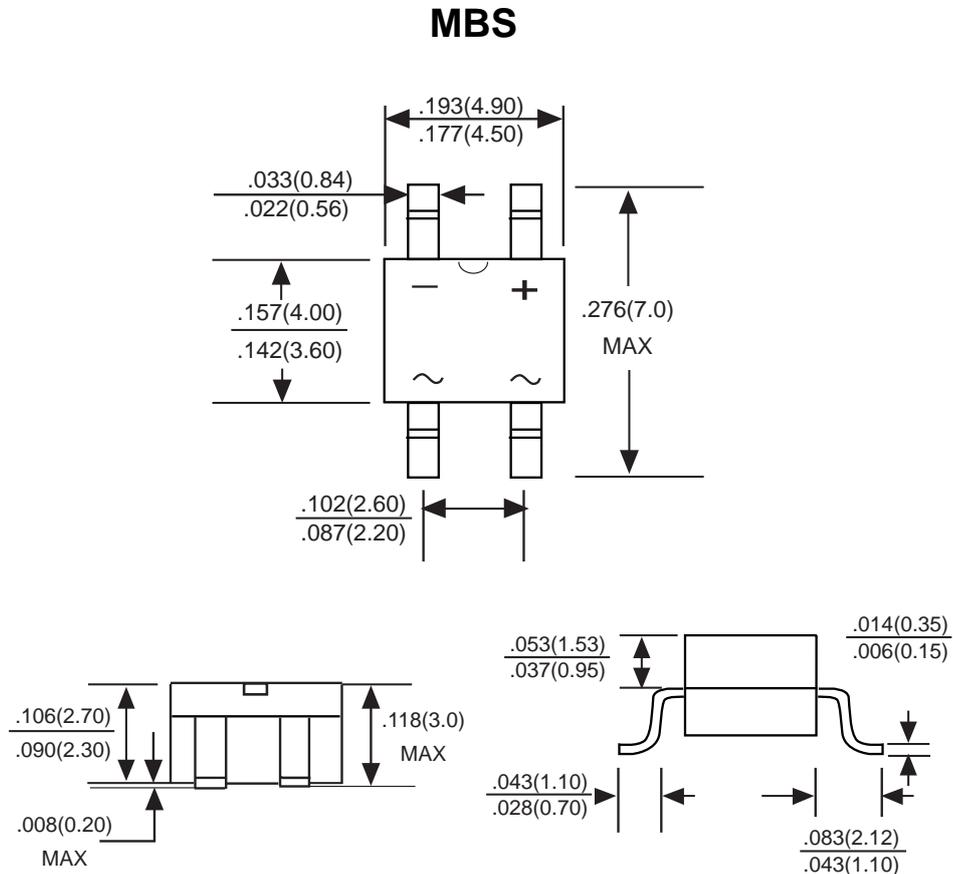


SPECIFICATIONS mm(inch)		PACKAGE	SPECIFICATIONS mm(inch)		PACKAGE
ITEM	SYM BOL	MBS	ITEM	SYM BOL	MBS
Carrier width	A	5.15(0.203)Max	Carrier depth	K	2.88(0.113)Typ
Carrier length	B	7.25(0.285)Max	Punch hole pitch	P	8.00(0.315)Typ
Sprocket hole	d	ø1.55(0.061)Typ	Sprocket hole pitch	P0	4.00(0.157)Typ
Reel outer diameter	D	330.0(13.0)Typ	Embossment center	P1	2.00(0.079)Typ
Reel inner diameter	D1	50.0(2.913)Min	Overall tape thickness	T	0.30(0.012)Typ
Feed hole diameter	D2	13.0(0.512)Typ	Tape width	W	12.0(0.472)Typ
Sprocket hole position	J	1.75(0.069)Typ	Reel width	W1	12.4(0.488)Min
Punch hole position	H	5.50(0.217)Typ			

3、Ordering Information

Part Number	Compliance	Case	Packaging
MBXS	Standard	MBS	3000/Tape & Reel

Dimension



Dimensions in inches and (millimeters)

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