

SURFACE MOUNT SCHOTTKY BRIDGE RECTIFIERS

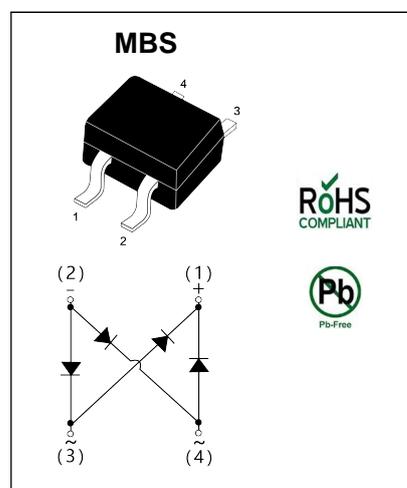
Reverse Voltage - 20 to 200 Volts Forward Current - 2.0 Ampere

Features

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Schottky technology
- Ideal for automated placement
- High surge current capability
- Built-in strain relief, ideal for automated placement
- High forward surge current capability
- High temperature soldering guaranteed: 260°C/10 seconds at terminals
- Green 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

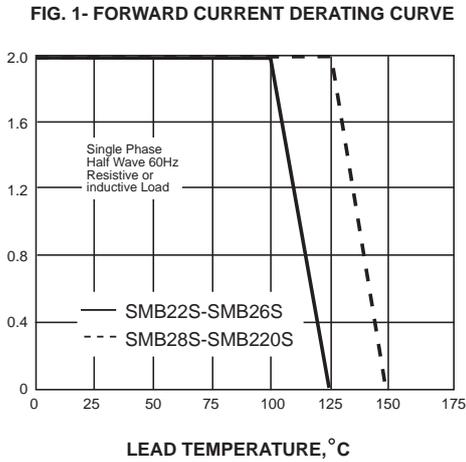
Ratings at 25°C ambient temperature unless otherwise specified.
Single phase half-wave 60Hz, resistive or inductive load, for capacitive load derate current by 20%.

	SYMBOLS	SMB22S	SMB23S	SMB24S	SMB25S	SMB26S	SMB28S	SMB210S	SMB215S	SMB220S	UNITS	
Maximum repetitive peak reverse voltage	V _{RRM}	20	30	40	50	60	80	100	150	200	V	
Maximum RMS voltage	V _{RMS}	14	21	28	35	42	56	70	105	140	V	
Maximum DC blocking voltage	V _{DC}	20	30	40	50	60	80	100	150	200	V	
Maximum average forward rectified current at T _L (see fig.1)	I _(AV)	2.0									A	
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	50.0									A	
Maximum instantaneous forward voltage at 2.0A	V _F	0.55			0.70			0.85		0.95	V	
Maximum DC reverse current T _A =25°C at rated DC blocking voltage T _A =100°C	I _R	0.5						5.0		2.0	mA	
Typical junction capacitance (NOTE 1)	C _J	120			90						pF	
Typical thermal resistance (NOTE 2)	R _{θJA}	85.0									°C/W	
Operating junction temperature range	T _J	-55 to +125					-55 to +150					°C
Storage temperature range	T _{STG}	-55 to +150									°C	

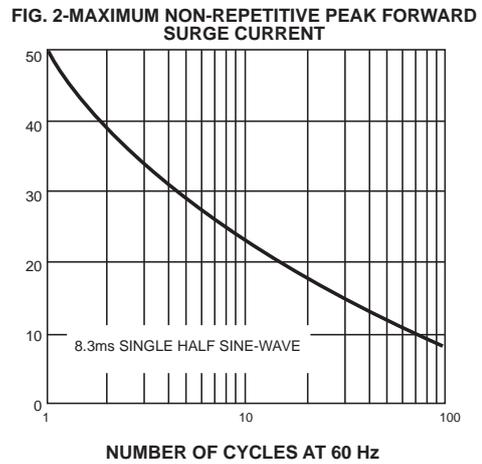
Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. P.C.B. mounted with 0.2x0.2"(5.0x5.0mm) copper pad areas

Ratings and characteristic curves SMB22S thru SMB220S

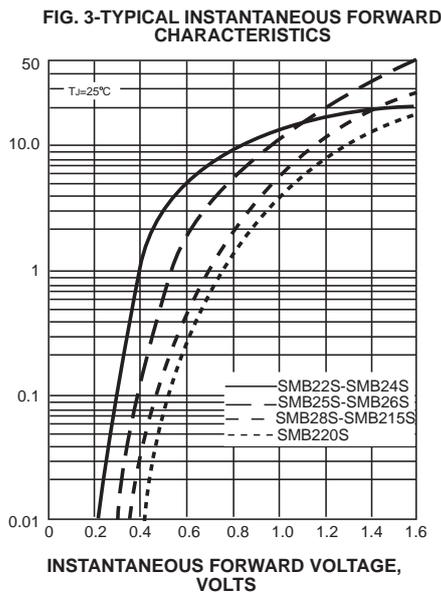
AVERAGE FORWARD RECTIFIED CURRENT,
AMPERES



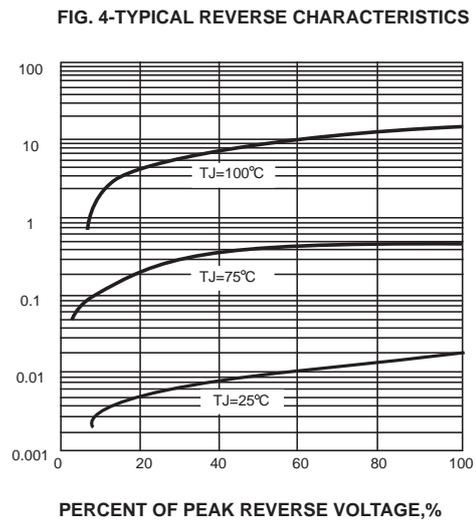
PEAK FORWARD SURGE CURRENT,
AMPERES



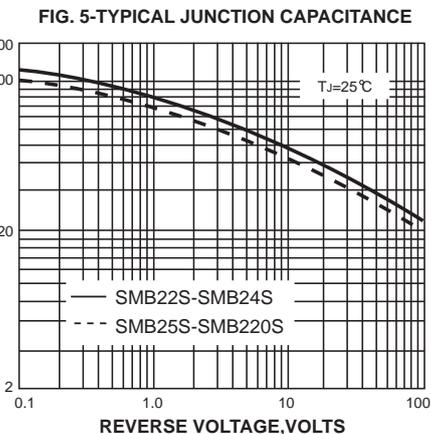
INSTANTANEOUS FORWARD CURRENT I_F, AMPERES



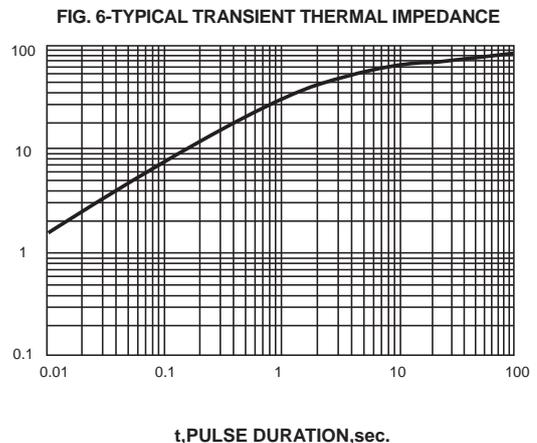
INSTANTANEOUS REVERSE CURRENT,
MILLIAMPERES



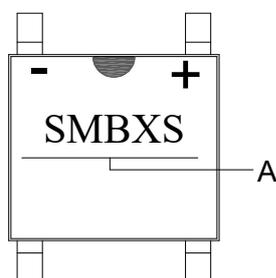
JUNCTION CAPACITANCE, pF



TRANSIENT THERMAL IMPEDANCE,
°C/W

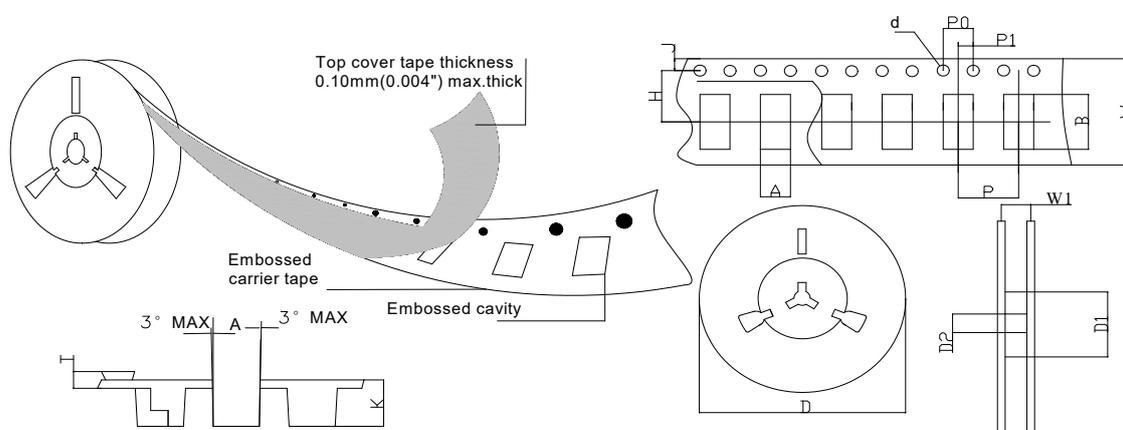


1、Marking



SYMBOL	Explanation
A	Product Name

2、Packaging



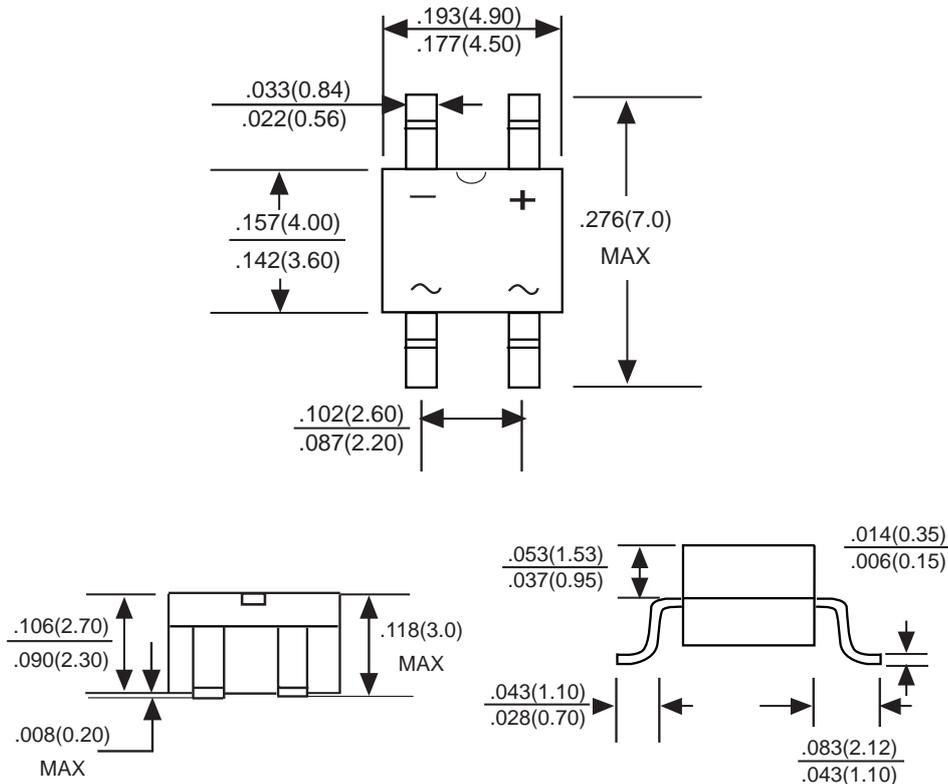
SPECIFICATIONS mm(inch)		PACKAGE	SPECIFICATIONS mm(inch)		PACKAGE
ITEM	SYM BOL	MBS	ITEM	SYM BOL	MBS
Carrier width	A	5.15(0.203)Max	Carrier depth	K	2.88(0.113)Typ
Carrier length	B	7.25(0.285)Max	Punch hole pitch	P	8.00(0.315)Typ
Sprocket hole	d	ø1.55(0.061)Typ	Sprocket hole pitch	P0	4.00(0.157)Typ
Reel 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
SMBXS	Standard	MBS	3000/Tape & Reel

Dimension

MBS



Dimensions in inches and (millimeters)

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