



SMB22S THRU SMB220S

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)

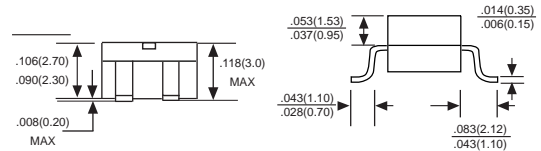
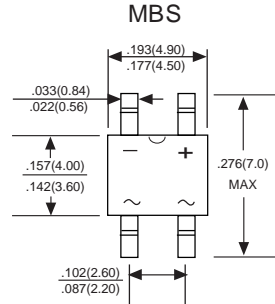
MECHANICAL DATA

Case: Molded plastic body

Terminals: Plated leads solderable per MIL-STD-750, Method 2026

Polarity: Polarity symbols marked on case

Mounting Position: Any



Dimensions in inches and (millimeters)

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%.

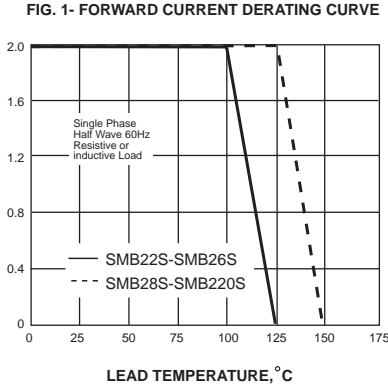
	SYMBOLS	SMB22S	SMB23S	SMB24S	SMB25S	SMB26S	SMB28S	SMB210S	SMB215S	SMB220S	UNITS	
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	50	60	80	100	150	200	V	
Maximum RMS voltage	V_{RMS}	14	21	28	35	42	56	70	105	140	V	
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	80	100	150	200	V	
Maximum average 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 at rated DC blocking voltage	I_R				0.5			0.2		mA		
					10.0			5.0		2.0		
Typical junction capacitance (NOTE 1)	C_J	120			90						pF	
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	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

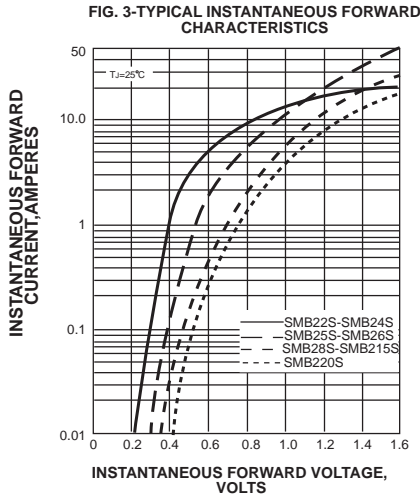
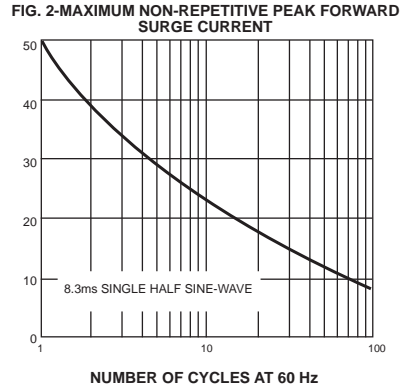


RATINGS AND CHARACTERISTIC CURVES SMB22S THRU SMB220S

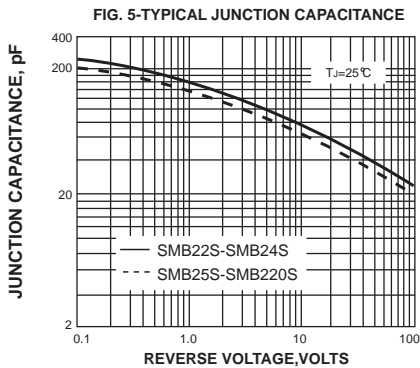
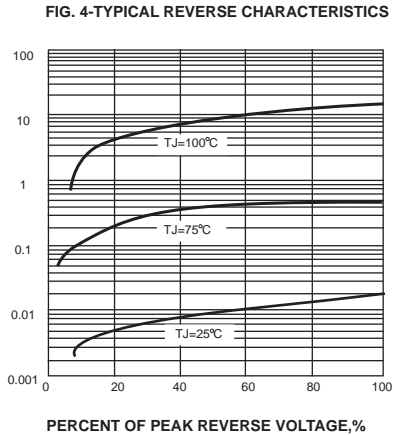
AVERAGE FORWARD RECTIFIED CURRENT, AMPERES



PEAK FORWARD SURGE CURRENT, AMPERES



INSTANTANEOUS REVERSE CURRENT, MILLIAMPERES



TRANSIENT THERMAL IMPEDANCE, °C/W

