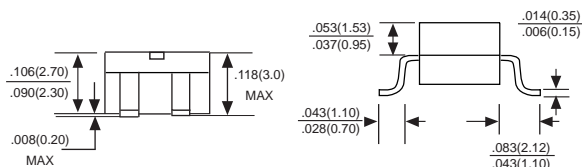
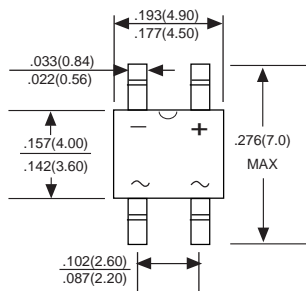


# SMB22S THRU SMB220S

## SURFACE MOUNT SCHOTTKY BRIDGE RECTIFIERS

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

### MBS



Dimensions in inches and (millimeters)

### 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 & Sb<sub>2</sub>O<sub>3</sub> 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

### 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%.

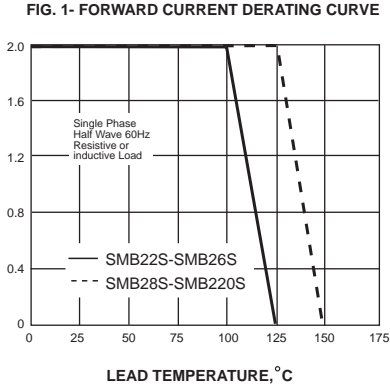
	SYMBOLS	SMB22S	SMB23S	SMB24S	SMB25S	SMB26S	SMB28S	SMB210S	SMB215S	SMB220S	UNITS	
Maximum repetitive peak reverse voltage	$V_{RRM}$	20	30	40	50	60	80	100	150	200	V	
Maximum RMS voltage	$V_{RMS}$	14	21	28	35	42	56	70	105	140	V	
Maximum DC blocking voltage	$V_{DC}$	20	30	40	50	60	80	100	150	200	V	
Maximum 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 $T_A=25^\circ\text{C}$ $T_A=100^\circ\text{C}$	$I_R$	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.

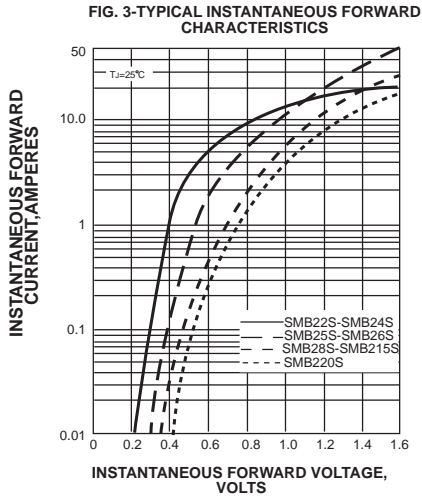
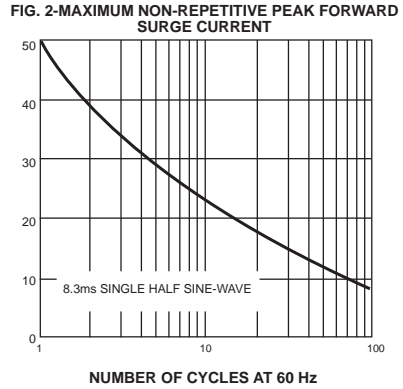
2. P.C.B. mounted with 0.2x0.2" (5.0x5.0mm) copper pad areas

# RATINGS AND CHARACTERISTIC CURVES SMB22S THRU SMB220S

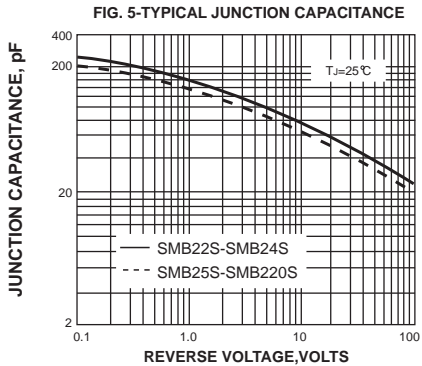
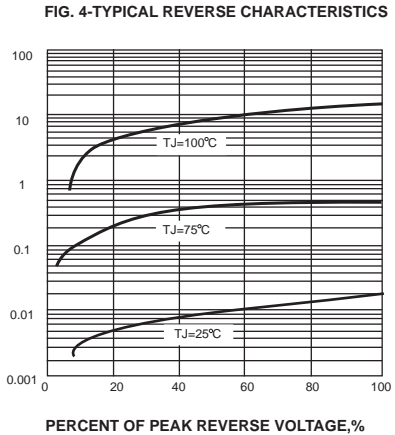
AVERAGE FORWARD RECTIFIED CURRENT,  
AMPERES



PEAK FORWARD SURGE CURRENT,  
AMPERES



INSTANTANEOUS REVERSE CURRENT,  
MILLIAMPERES



TRANSIENT THERMAL IMPEDANCE,  
°C/W

