



SMB12F THRU SMB120F

SURFACE MOUNT SCHOTTKY BRIDGE RECTIFIERS

Reverse Voltage - 20 to 200 Volts Forward Current - 1.0 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

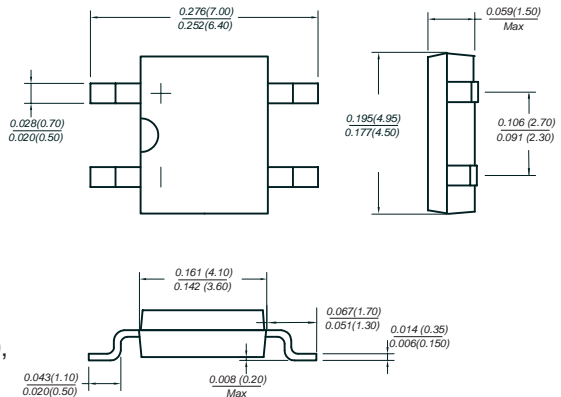
Case: Molded plastic body

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

Polarity: Polarity symbols marked on case

Mounting Position: Any

MBF



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	SMB12F	SMB13F	SMB14F	SMB15F	SMB16F	SMB18F	SMB110F	SMB115F	SMB120F	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)	$I_{(AV)}$	1.0									A	
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	30.0									A	
Maximum instantaneous forward voltage at 1.0A	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				10.0		5.0		2.0		mA
Typical junction capacitance (NOTE 1)	C_J	110			90						pF	
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	88.0										$^\circ\text{C/W}$
Operating junction temperature range	T_J	-55 to +125					-55 to +150					$^\circ\text{C}$
Storage temperature range	T_{STG}	-55 to +150										$^\circ\text{C}$

Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

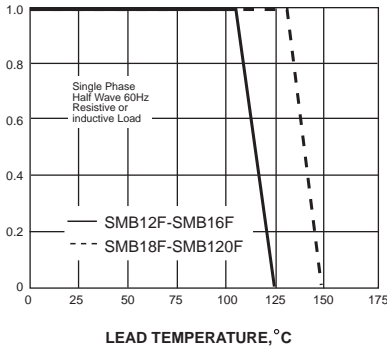
2. P.C.B. mounted with 0.2x0.2" (5.0x5.0mm) copper pad areas



RATINGS AND CHARACTERISTIC CURVES SMB12F THRU SMB120F

AVERAGE FORWARD RECTIFIED CURRENT, AMPERES

FIG. 1- FORWARD CURRENT DERATING CURVE



PEAK FORWARD SURGE CURRENT, AMPERES

FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

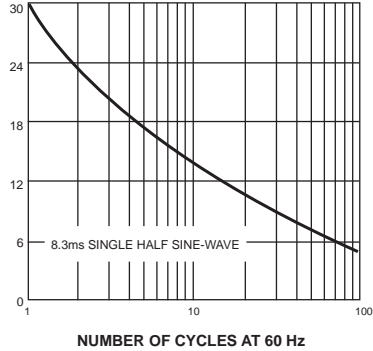
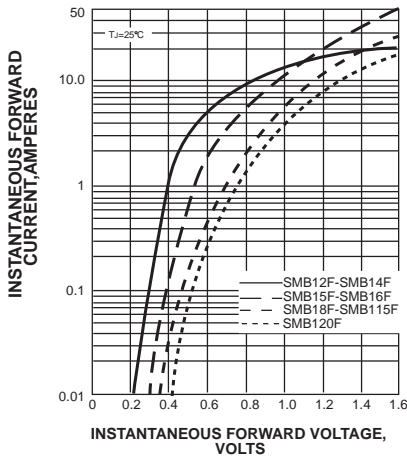


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



INSTANTANEOUS REVERSE CURRENT, MILLIAMPERES

FIG. 4-TYPICAL REVERSE CHARACTERISTICS

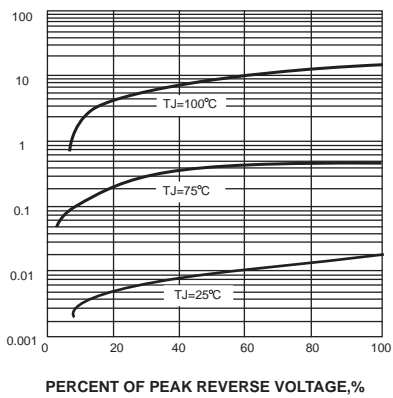
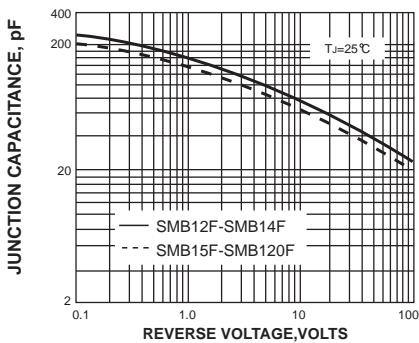
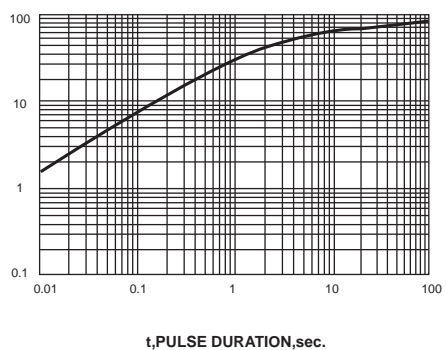


FIG. 5-TYPICAL JUNCTION CAPACITANCE



TRANSIENT THERMAL IMPEDANCE, °C/W

FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE



单击下面可查看定价，库存，交付和生命周期等信息

[>>ZG\(中鑫半导体\)](#)