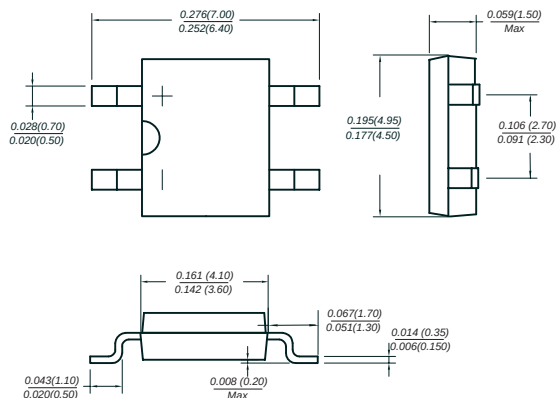


SMB12F THRU SMB120F

SURFACE MOUNT SCHOTTKY BRIDGE RECTIFIERS

Reverse Voltage - 20 to 200 Volts Forward Current - 1.0 Ampere

MBF



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&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

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%.

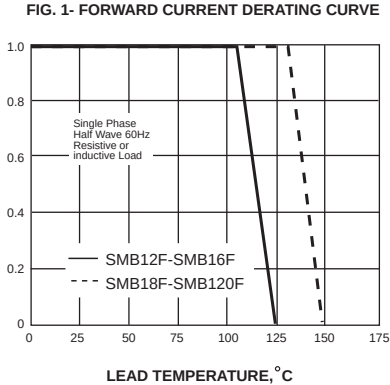
	SYMBOLS	SMB12F	SMB13F	SMB14F	SMB15F	SMB16F	SMB18F	SMB110F	SMB115F	SMB120F	UNITS
Maximum repetitive peak reverse voltage	V _{RRM}	20	30	40	50	60	80	100	150	200	v
Maximum RMS voltage	V _{RMS}	14	21	28	35	42	56	70	105	140	v
Maximum DC blocking voltage	V _{DC}	20	30	40	50	60	80	100	150	200	v
Maximum average 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 T _A =25°C	I _R	0.5						0.2		mA	
at rated DC blocking voltage T _A =100°C		10.0			5.0			2.0			
Typical junction capacitance (NOTE 1)	C _J	110			90						pF
Typical thermal resistance (NOTE 2)	R _{θJA}	88.0									°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.

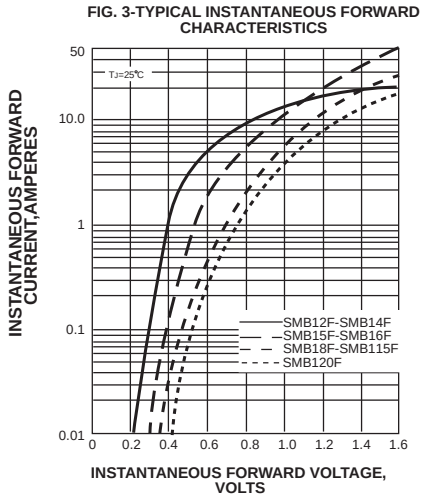
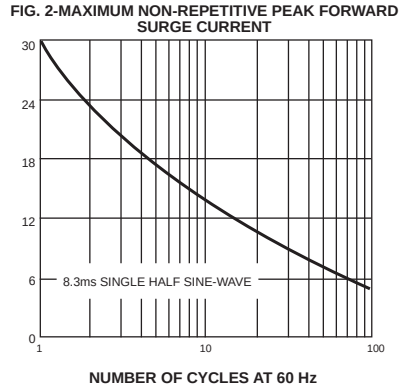
2. P.C.B. mounted with 0.2x0.2"(5.0x5.0mm) copper pad areas

RATINGS AND CHARACTERISTIC CURVES SMB12F THRU SMB120F

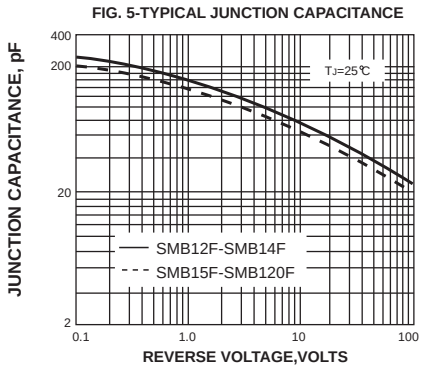
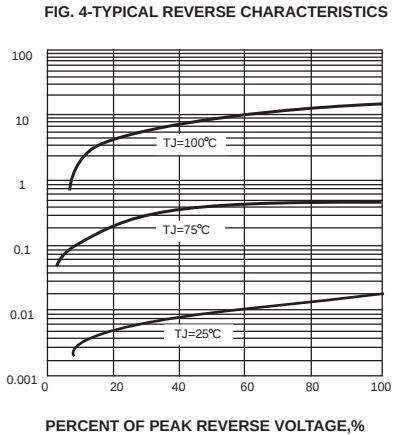
AVERAGE FORWARD RECTIFIED CURRENT,
AMPERES



PEAK FORWARD SURGE CURRENT,
AMPERES



INSTANTANEOUS REVERSE CURRENT,
MILLIAMPERES



TRANSIENT THERMAL IMPEDANCE,
°C/W

