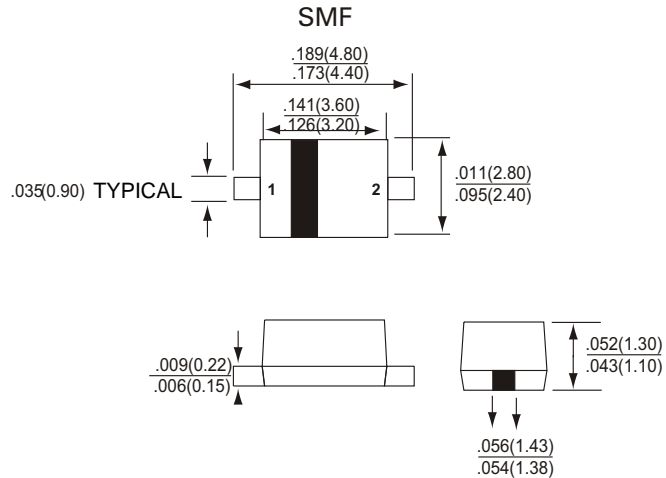
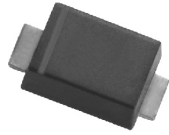


SMF12 thru SMF110

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE - 20 TO 100 VOLTS CURRENT - 1.0 AMPERES



FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- For surface mounted applications
- Low profile package
- Built-in strainrelief
- Metal to silicon rectifier. majority carrier conduction
- Low power loss,high efficiency
- High surge capacity
- High current capacity
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications.
- High temperaturesoldering guaranteed: 260°C /10 seco at terminals
- High temperature soldering : 260 °C / 10 seconds at ter
- Pb free product at available : 99% Sn above meet RoHS environment substance directive request

MECHANICAL DATA

- Case : JEDEC DO-214AC molded plastic
- Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity : Color band denotes cathode end
- Standard Package : 12mm tape (EIA STD EIA-481)
- Weight : 0.002 ounce, 0.064gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	SYMBOLS	SMF12	SMF13	SMF14	SMF15	SMF16	SMF18	SMF19	SMF110	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	20	30	40	50	60	80	90	100	V
Maximum RMS Voltage	V _{RMS}	14	21	28	35	42	56	64	71	V
Maximum DC Blocking Voltage	V _{DC}	20	30	40	50	60	80	90	100	V
Maximum Average Forward Rectified Current at TL (See figure 1)	I(AV)	1.0								A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	30.0								A
Maximum Instantaneous Forward Voltage at 1.0A (Note 1)	V _F	0.50		0.70		0.85			V	
Maximum DC Reverse Current (Note 1) Ta= 25°C at Rated DC Blocking Voltage Ta=100°C	I _R	0.5								mA
		20.0								
Maximum Thermal Resistance(Note 2)	R _{θJL} R _{θJA}	28.0								°C/W
		88.0								
Operating and Storage Temperature Range T _J	T _J	-50 to +150								°C
Storage Temperature Range	T _{STG}	-55 to +150								°C

NOTES:

- A.Pulse Test with PW =300µsec, 2% Duty Cycle.
- B.Mounted on P.C. Board with 5.0mm2 (.013mm thick) copper pad areas.

SMF12 thru SMF110

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

DEVICE CHARACTERISTICS

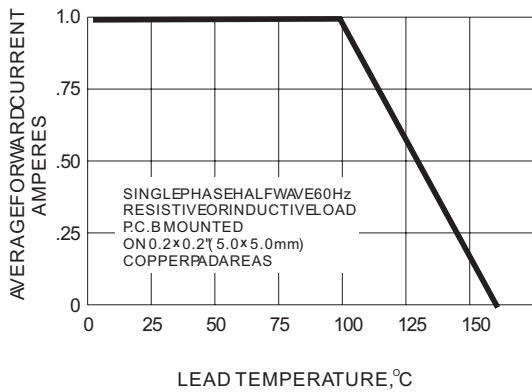


Fig.1-FORWARD CURRENT DERATING CURVE

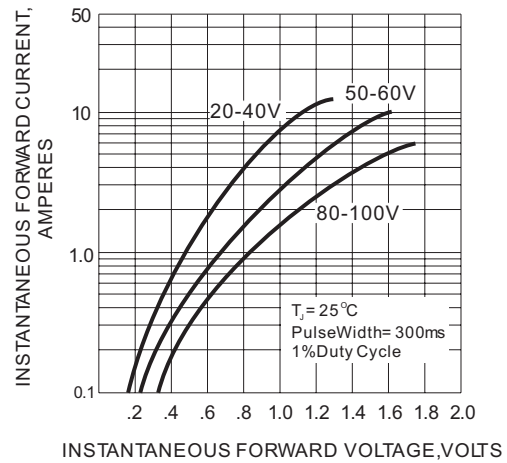


Fig.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

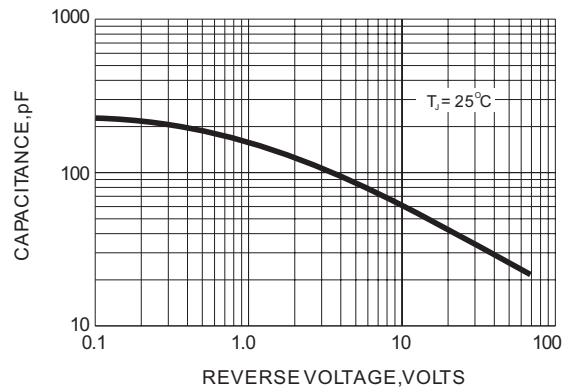


Fig.3-TYPICAL JUNCTION CAPACITANCE

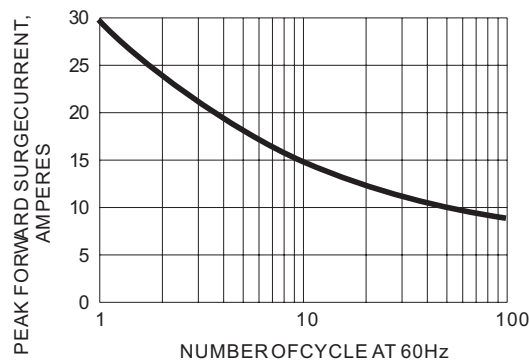


Fig.4-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT