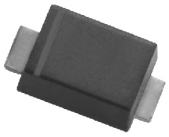
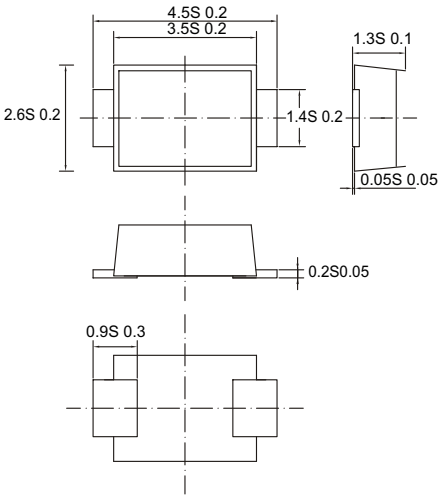
SMF32 thru SMF36

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE - 20 TO 60 VOLTS CURRENT - 3.0 AMPERES



SMF



FEATURES

- Fast switching
- Low switching noise
- Low forward voltage drop
- High current capability
- High switching capability
- High reliability
- High surge capability

MECHANICAL DATA

Case：Molded plastic
Epoxy：Device has UL flammability 94V-0
Lead：MIL-STD-202E, Method 208C guaranteed
Metallurgically bonded construction
Mounting position：Any
Weight： 0.24gram

MAXIMUM RATIXGS 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%

RATINGS		SYMBOL	SMF32	SMFS33	SMFS34	SMFS35	SMFS36	UNITS
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	20	30	40	50	60	Volts
Maximum RMS Voltage		V_{RMS}	14	21	28	35	42	Volts
Maximum DC Blocking Voltage		V_{DC}	20	30	40	50	60	Volts
Maximum Average Forward Rectified Current at Derating Lead Temperature		$I_{(AV)}$	3.0					Amps
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)		I_{FSM}	80					Amps
Maximum Instantaneous Forward Voltage at 3.0A DC		V_F	0.5			0.75		Volts
Maximum Average Reverse	$@T_A=25^oC$	I_R	2.0					mA
Current at Rated DC Blocking Voltage at Note1	$@T_A=125^oC$		20					
Typical Thermal Resistance (Note1)		$R_{\theta JA}$	25					^oC / W
Typical Junction Capacitance(Note2)		C_J	200					pF
Operating Temprature Range		T_J	-55 to +150					^oC
Storage Temperature Range		T_{STG}	-55 to +150					^oC

NOTES：
1. Pulse test：300 μS pulse width 1% duty cycle
2. Measured at 1.0MHz and applied reverse voltage of 4.0 volts DC.
3. Thermal resistance junction to terminal 6.0mm^2 copper pads to each terminal.
4. Thermal resistance junction to ambient 6.0mm^2 copper pads to each terminal.

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

RATING AND CHARACTERISTICS CURVES SMF32 THRU SMF36

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

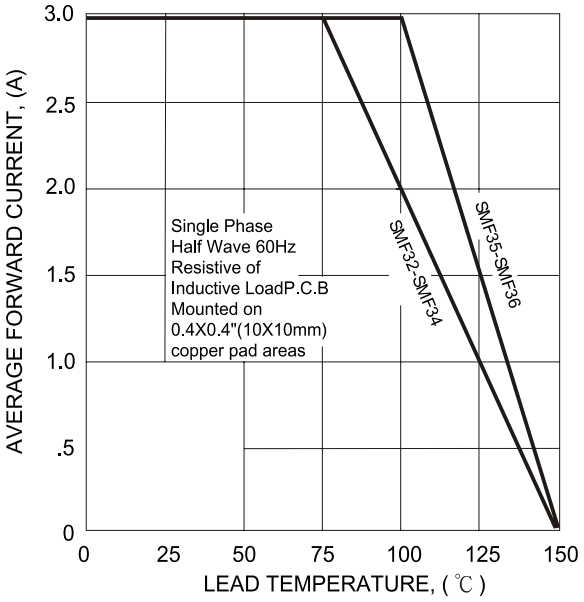


FIG. 2 - TYPICAL REVERSE CHARACTERISTICS

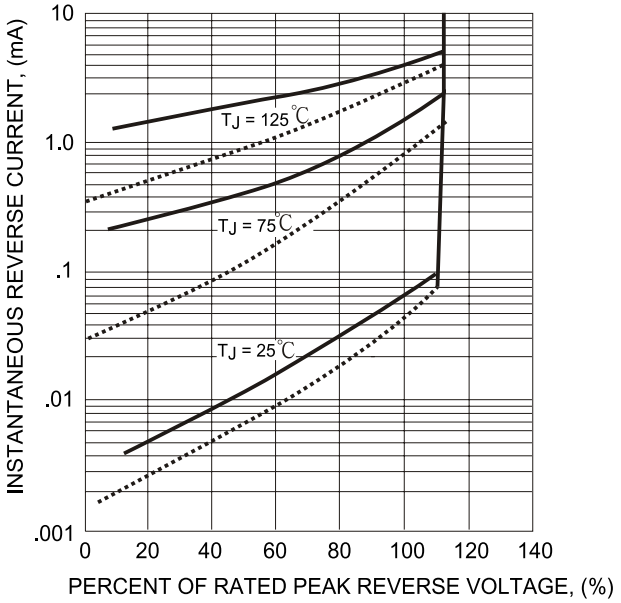


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

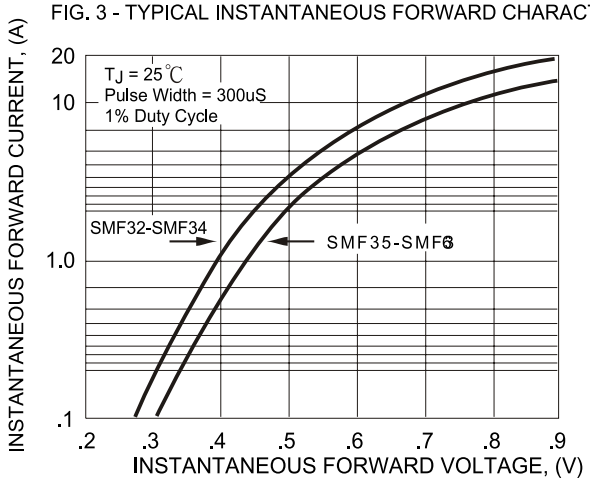


FIG. 4 - TYPICAL JUNCTION CAPACITANCE

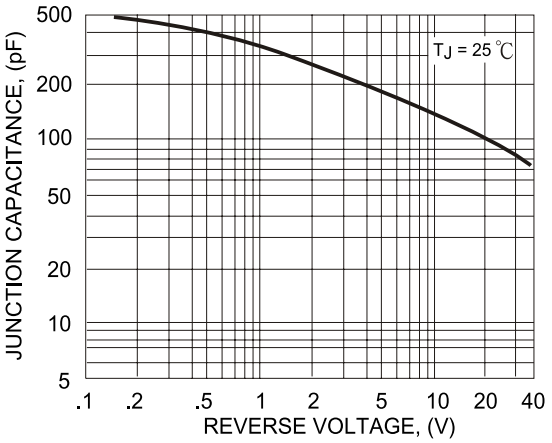


FIG. 5 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT