

### SCHOTTKY BARRIER RECTIFIER

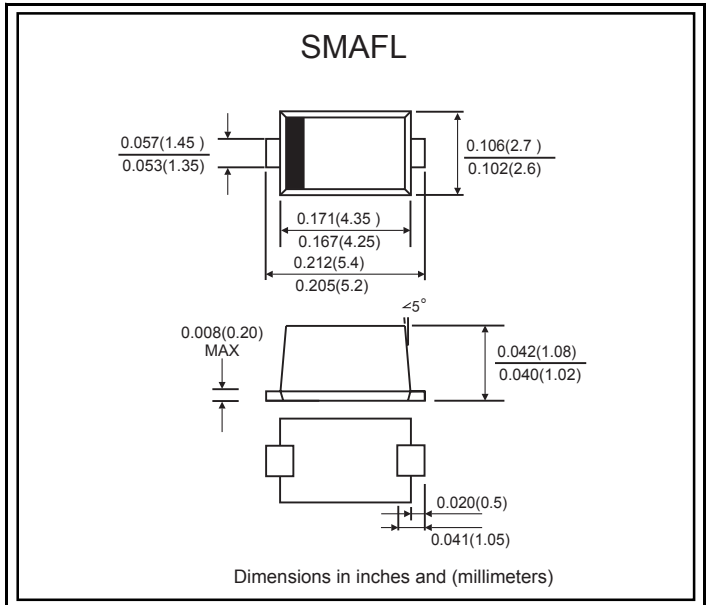
**VOLTAGE RANGE: 60 V**  
**CURRENT: 5.0 A**

#### FEATURES

- . Very low forward voltage:0.55V
- . Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- . Metal silicon junction ,majority carrier conduction
- . For surface mount applications
- . Low power loss ,high efficiency
- . High current capability ,Low forward voltage drop
- . Low profile package
- built-in strain relief ,ideal for automated placement
- . For use in low voltage ,high frequency inverters, free wheeling ,and polarity protection applications
- . High temperature soldering guaranteed:260 °C/10 seconds at terminals
- . Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC

#### MECHANICAL DATA

- . Case: SMAFL molded plastic body
- . Terminals: Solder Plated, solderable per MIL-STD-750,method 2026
- . Polarity: Color band denotes cathode end
- . Weight: 0.003ounce, 0.093 gram



#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

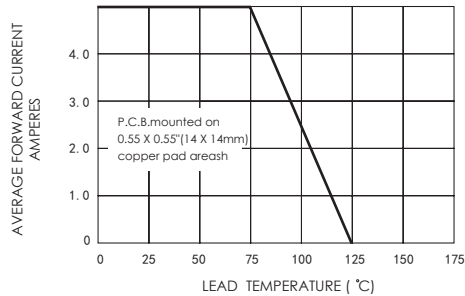
Ratings at 25 °C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate by 20%.

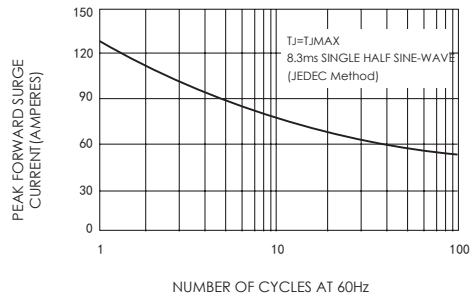
	Symbols	SS56LT	Volts
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	60	Volts
Maximum RMS voltage	V <sub>RMS</sub>	42	Volts
Maximum DC blocking voltage	V <sub>DC</sub>	60	Volts
Maximum average forward rectified current 0.375"(9.5mm) lead length (See Fig.1)	I(AV)	5.0	Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	120	Amps
Maximum instantaneous forward voltage (Note 1)	V <sub>F</sub> at 3.0 A V <sub>F</sub> at 5.0 A	0.5 0.55	Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	I <sub>R</sub>	T <sub>a</sub> = 25°C	0.35
		T <sub>a</sub> = 100°C	30
Typical thermal resistance (Note 2)	R <sub>θJA</sub>	55.0	°C/W
	R <sub>θJL</sub>	17.0	
Operating junction temperature range	T <sub>J</sub>	-65 to +125	°C
Storage temperature range	T <sub>STG</sub>	-65 to +150	°C

NOTE: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.  
2. Thermal resistance from junction to ambient.

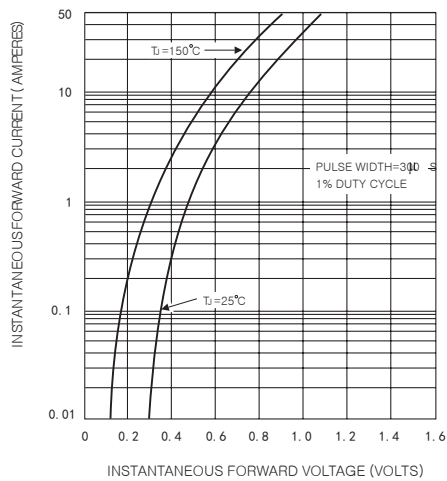
**FIG.1-FORWARD CURRENT DERATING CURVE**



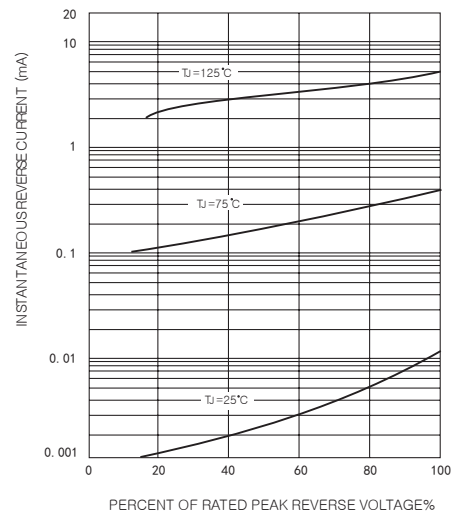
**FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**



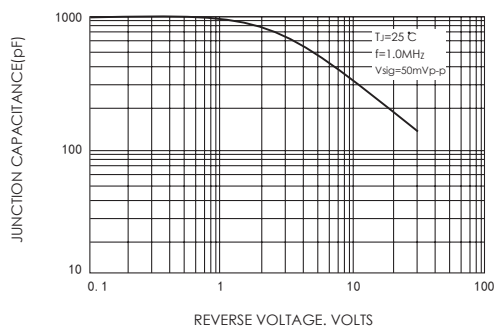
**FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



**FIG.4-TYPICAL REVERSE CHARACTERISTICS**



**FIG.5-TYPICAL JUNCTION CAPACITANCE**



**FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE**

