SAMYANG ELECTRONICS

SS56LT --- SSAFL

SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE: 60 V
CURRENT: 5.0 A

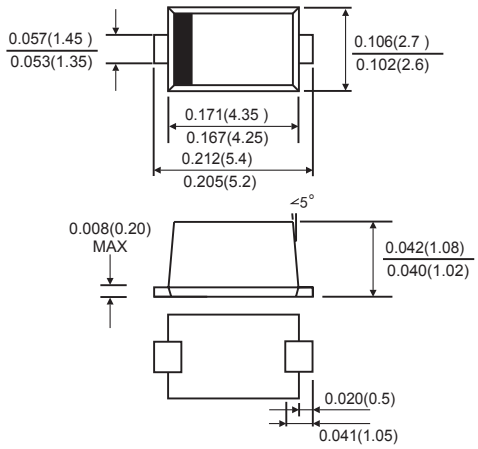
FEATURES

. 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 ℃/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

SMAFL



Dimensions in inches and (millimeters)

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_{RRM}	60	Volts
Maximum RMS voltage		V_{RMS}	42	Volts
Maximum DC blocking voltage		V_{DC}	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_{FSM}	120	Amps
Maximum instantaneous forward voltage (Note 1)		V_F at 3.0 A V_F at 5.0 A	0.5 0.55	Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	T_A =25℃	I_R	0.35	mA
	T_A =100℃		30	
Typical thermal resistance (Note 2)		$R_{\theta JA}$ $R_{\theta JL}$	55.0 17.0	℃/W
Operating junction temperature range		T_J	-65 to+125	℃
Storage temperature range		T_{STG}	-65 to+150	℃

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

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FIG.1-FORWARD CURRENT DERATING CURVE

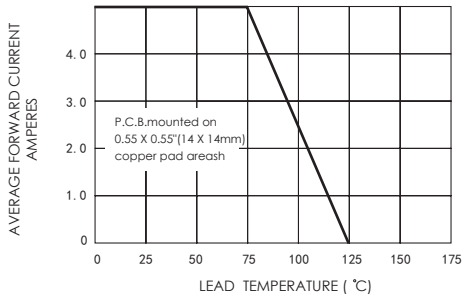


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

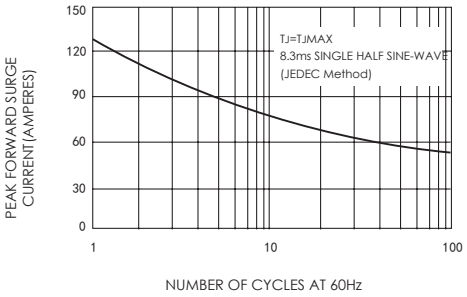


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

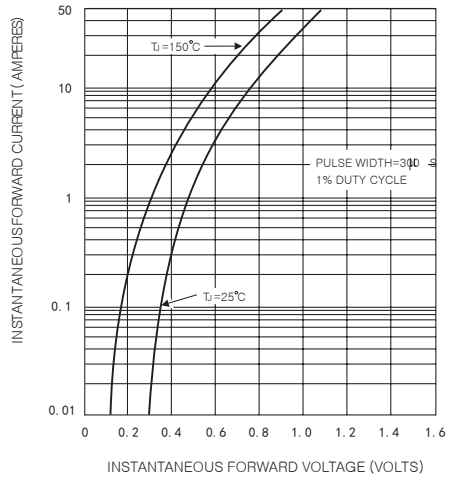


FIG.4-TYPICAL REVERSE CHARACTERISTICS

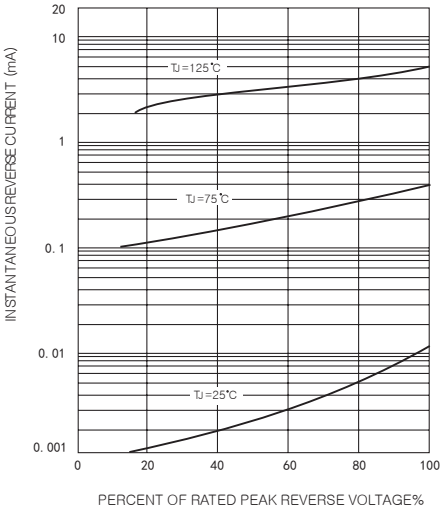


FIG.5-TYPICAL JUNCTION CAPACITANCE

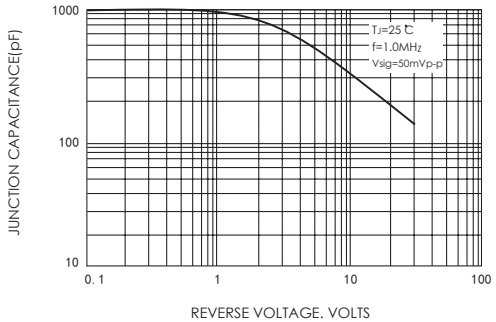
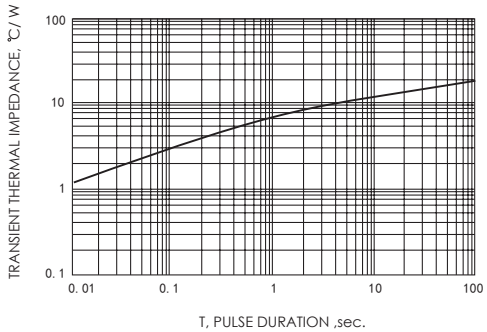


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE



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