

SS52L~SS510L 5.0Amp Schottky Barrier Rectifiers

Features

- ◆ For surface mounted applications
- ◆ Low forward voltage drop
- ◆ Low power loss,high efficiency
- ◆ Construction utilizes void-free molded plastic technique
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed:
260°C/10 seconds at terminals

Mechanical Data

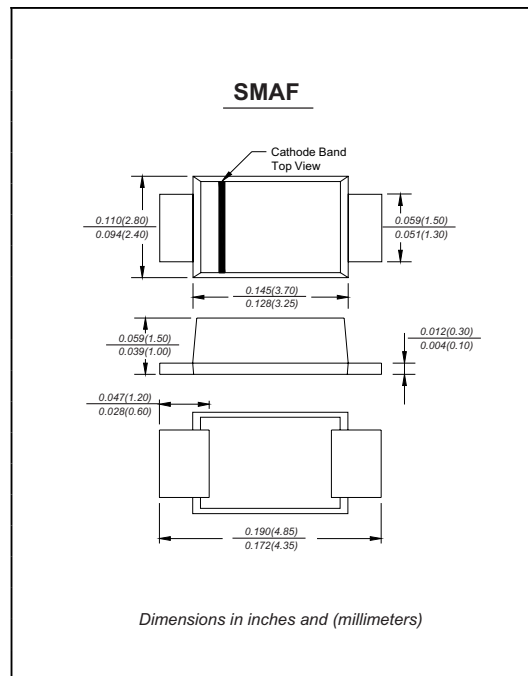
Case: JEDEC SMAF molded plastic body

Terminals: Solder plated, solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight: 0.0014 ounce, 0.038 grams



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%.

MDD Catalog Number	SYMBOLS	SS52L	SS54L	SS56L	SS510L	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	20	40	60	100	VOLTS
Maximum RMS voltage	V_{RMS}	14	28	42	70	VOLTS
Maximum DC blocking voltage	V_{DC}	20	40	60	100	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}	120.0				Amps
Maximum instantaneous forward voltage at 5.0A	V_F	0.40	0.45	0.55	0.70	Volts
$T_A=25^{\circ}C$ $T_A=125^{\circ}C$		0.35	0.40	0.50	0.62	
Maximum DC reverse current at rated DC blocking voltage	I_R	1.0			0.5	mA
$T_A=25^{\circ}C$ $T_A=125^{\circ}C$		50.0			20.0	
Typical junction capacitance (NOTE 1)	C_J	200				pF
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	60				°C/W
Operating junction temperature range	T_J	-50 to +125				°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

SS52L THRU SS510L

FIG. 1- FORWARD CURRENT DERATING CURVE

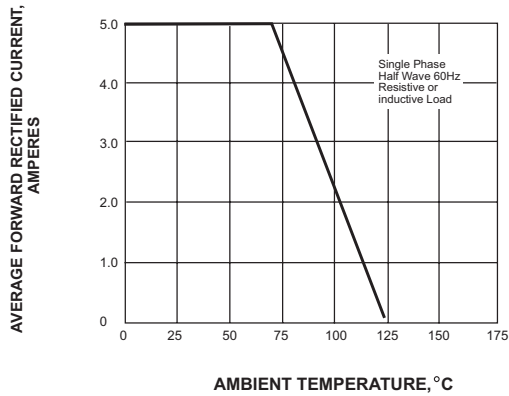


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

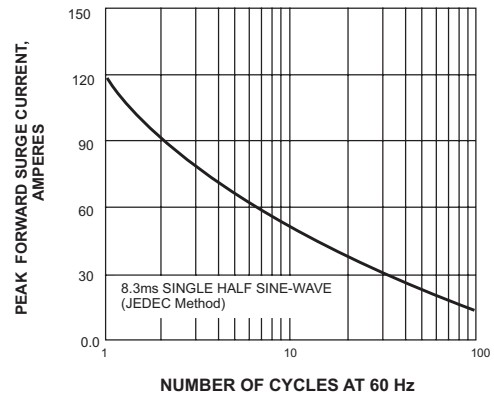


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

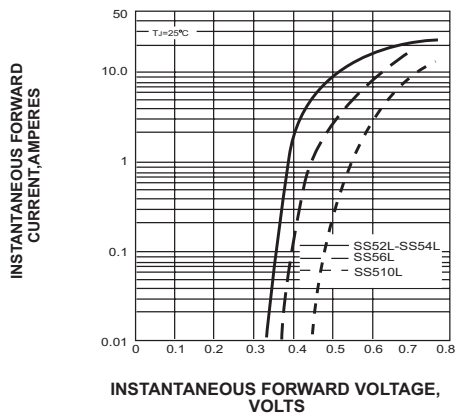


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

