

SL12AF~SL110AF 1.0Amp 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

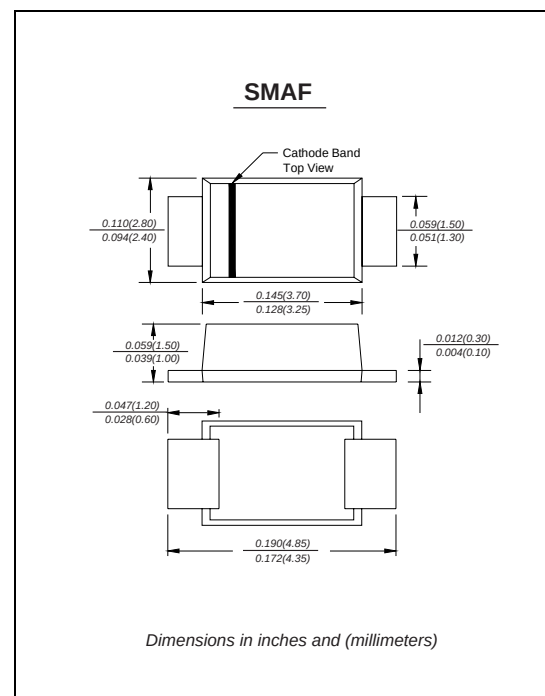
Case: JEDEC SMAF molded plastic body

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	SL12AF	SL14AF	SL16AF	SL110AF	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)	$I_{(AV)}$	1.0				Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30.0				Amps
Maximum instantaneous forward voltage at 1.0A $T_A=25^{\circ}C$ $T_A=125^{\circ}C$	V_F	0.40 0.35	0.45 0.40	0.55 0.50	0.70 0.62	Volts
Maximum DC reverse current at rated DC blocking voltage $T_A=25^{\circ}C$ $T_A=125^{\circ}C$	I_R	1.0 50.0			0.5 20.0	mA
Typical junction capacitance (NOTE 1)	C_J	100				pF
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	75				°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

SL12AF THRU SL110AF

FIG. 1- FORWARD CURRENT DERATING CURVE

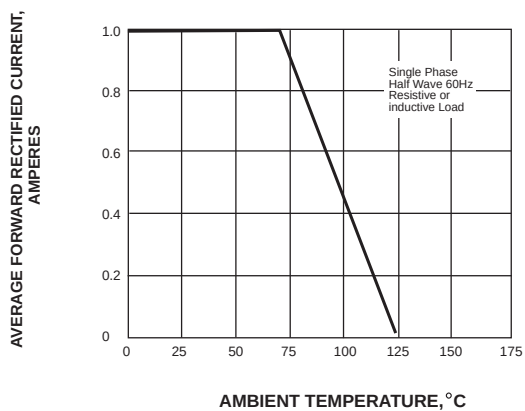


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

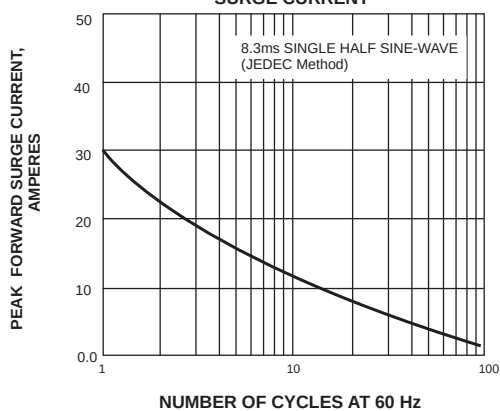


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

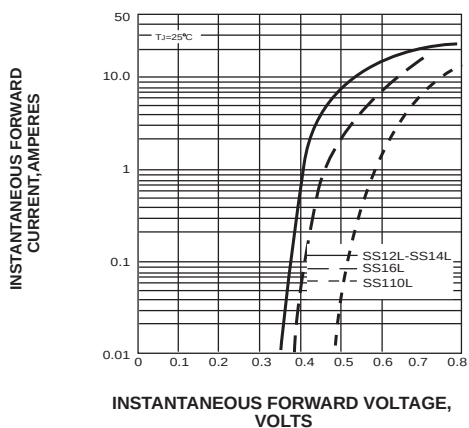


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

