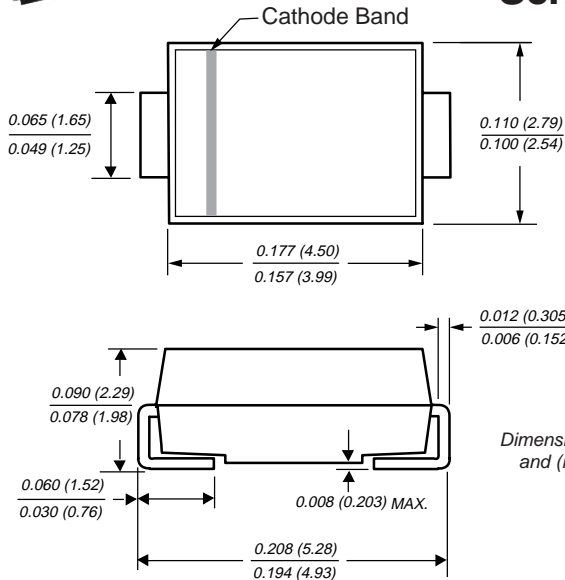




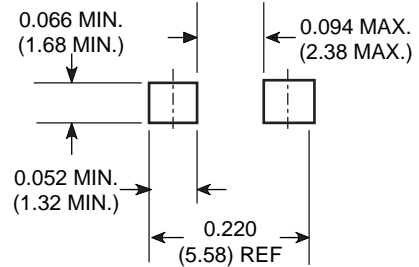
DO-214AC (SMA)

Low V_F Surface Mount Schottky Rectifier

Reverse Voltage 20 to 30V
Forward Current 1.5A



Mounting Pad Layout



Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Low profile surface mount package
- Built-in strain relief
- Low power loss, high efficiency
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- Guardring for overvoltage protection
- High temperature soldering guaranteed: 250°C/10 seconds at terminals

Mechanical Data

Case: JEDEC DO-214AC molded plastic body

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

Polarity: Color band denotes cathode end

Weight: 0.002 ounce 0.064 gram

Maximum Ratings and Thermal Characteristics ($T_A = 25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	SL12	SL13	Unit
Device marking code		SL2	SL3	
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	V
Maximum RMS voltage	V_{RMS}	14	21	V
Maximum DC blocking voltage	V_{DC}	20	30	V
Maximum average forward rectified current at T_L (SEE FIG.1)	$I_{F(AV)}$	1.5		A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	50		A
Maximum thermal resistance ⁽²⁾	$R_{\theta JA}$ $R_{\theta JL}$	88 28		$^\circ\text{C/W}$
Operating junction temperature range	T_J	-55 to +125		$^\circ\text{C}$
Storage temperature range	T_{STG}	-55 to 150		$^\circ\text{C}$

Electrical Characteristics ($T_A = 25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	SL12	SL13	Unit
Maximum instantaneous forward voltage at (NOTE 1) $I_F=0.1\text{A}, T_A=125^\circ\text{C}$ $I_F=0.1\text{A}, T_A=25^\circ\text{C}$ $I_F=1.0\text{A}, T_A=125^\circ\text{C}$ $I_F=1.0\text{A}, T_A=25^\circ\text{C}$	V_F	0.230 0.360 0.340 0.445		V
Maximum DC reverse current ⁽¹⁾ at rated DC blocking voltage $T_A=25^\circ\text{C}$ $T_A=100^\circ\text{C}$	I_R	0.2 6.0		mA

Notes: (1) Pulse test: 300 μs pulse width, 1% duty cycle
(2) P.C.B. mounted with 0.2 x 0.2" (5.0 x 5.0mm) copper pad areas

Ratings and Characteristic Curves ($T_A = 25^\circ\text{C}$ unless otherwise noted)

Fig. 1 – Forward Current Derating Curve

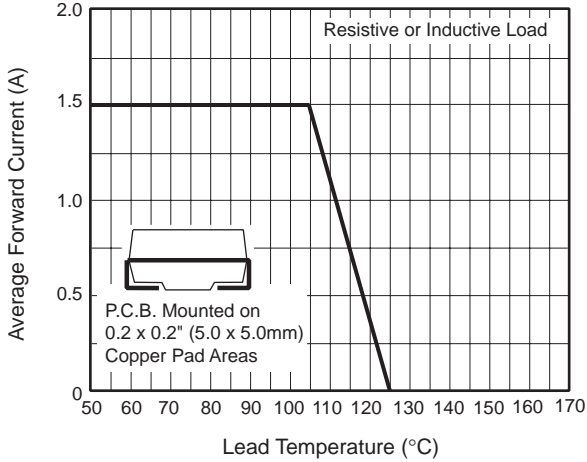


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current

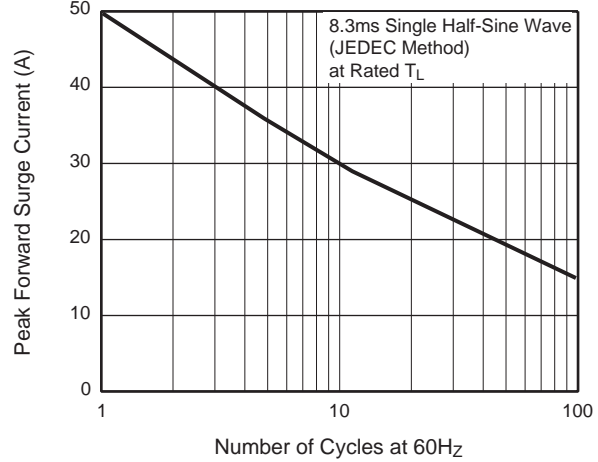


Fig. 3 – Typical Instantaneous Forward Characteristics

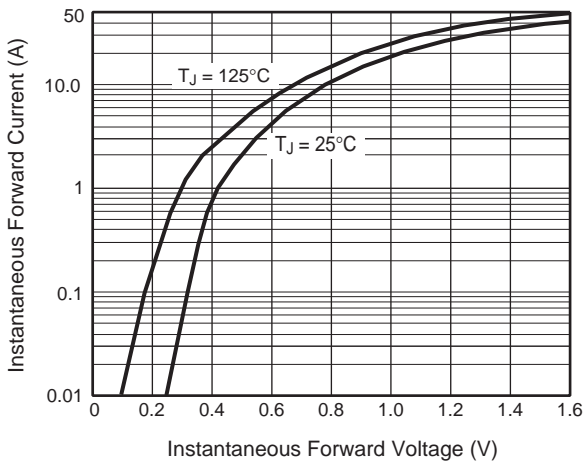


Fig. 4 – Typical Reverse Characteristics

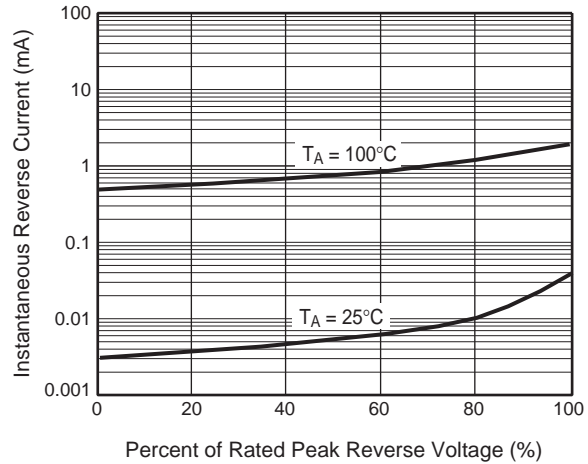


Fig. 5 – Typical Junction Capacitance

