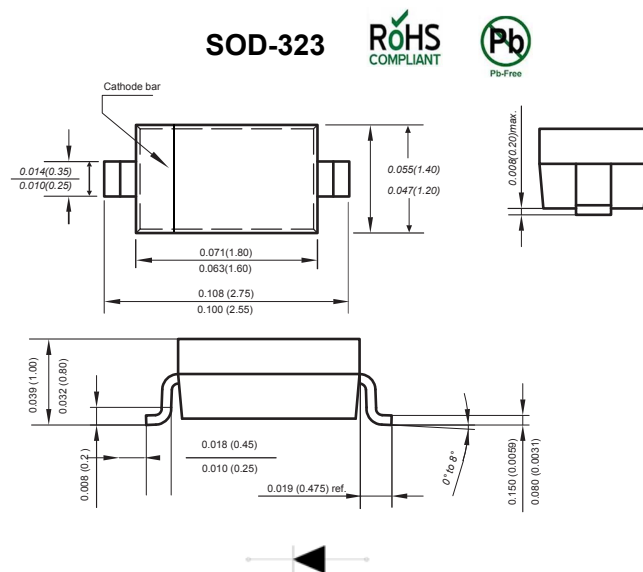


Features

- Metal silicon junction, majority carrier conduction
- Guarding for overvoltage protection
- Low power loss, high efficiency
- High current capability
- Low forward voltage drop
- High surge capability
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications

Marking Code: 1N5817WS: **SJ**
 1N5818WS: **SK**
 1N5819WS: **SL**



Dimensions in inches and (millimeters)

Absolute Maximum Ratings (Ta=25°C unless otherwise specified)

Parameter	Symbols	1N5817WS	1N5818WS	1N5819WS	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	30	40	V
Maximum RMS voltage	V_{RMS}	14	21	28	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	1			A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed On Rated Load (JEDEC)	I_{FSM}	9			A
Maximum Instantaneous Forward Voltage at 1 A at 3 A	V_F	0.45 0.75	0.55 0.875	0.6 0.9	V
Maximum Instantaneous Reverse Current at $T_A = 25^\circ\text{C}$ Rated DC Reverse Voltage $T_A = 100^\circ\text{C}$	I_R	1 10			mA
Typical Junction Capacitance	C_J	110			pF
Storage and Operating Junction Temperature Range	T_J, T_{stg}	-55 ~ +150			°C



Typical Characteristic Curves

Fig.1 Forward Current Derating Curve

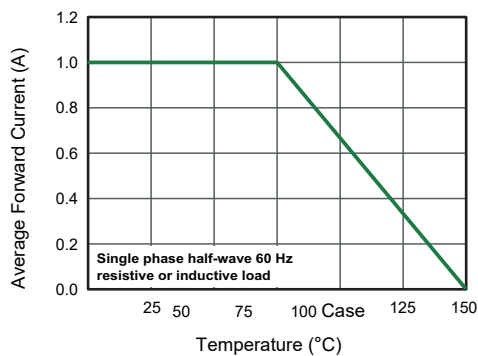


Fig.2 Typical Reverse Characteristics

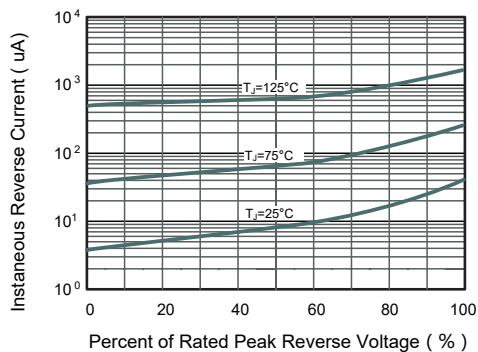


Fig.3 Typical Forward Characteristic

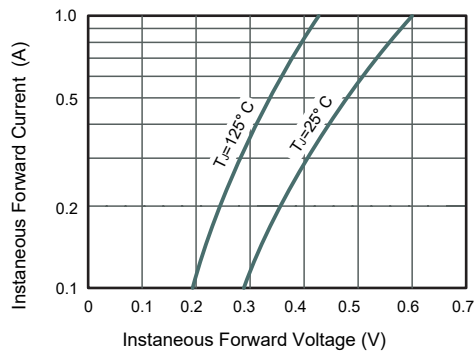
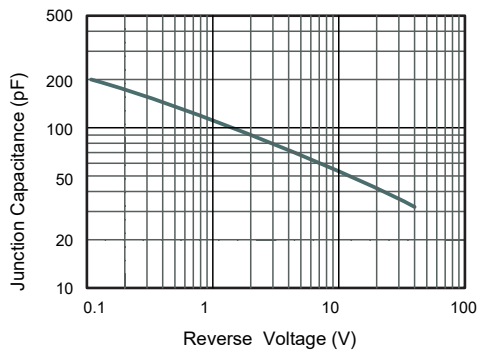
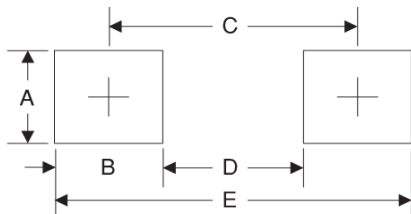


Fig.4 Typical Junction Capacitance



Suggested Pad Layout



Symbol	Unit (mm)	Unit (inch)
A	0.7	0.028
B	0.7	0.028
C	2.15	0.085
D	1.8	0.071
E	2.85	0.112