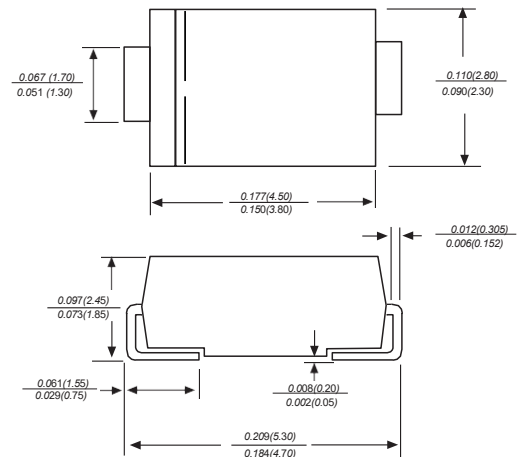


SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

Features

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ For surface mounted applications
- ◆ Metal silicon junction, majority carrier conduction
- ◆ Low power loss, high efficiency
- ◆ Built-in strain relief, ideal for automated placement
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed:
250 °C/10 seconds at terminals

DO-214AC/SMA



Dimensions in inches and (millimeters)

Cas e : JEDEC DO-214AC/SMA molded plastic body
Termina ls : Solderable per MIL-STD-750, Method
Po larity : Color band denotes cathode end Moun ting
Po sition : Any
Weigh t : 0.002 ounce, 0.07 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%.

Parameter	SYMBOLS	SS12	SS13	SS14	SS15	SS16	SS18	SS110	SS1150	SS1200	UNITS
Marking Code											
Maximum repetitive peak reverse voltage	V _{RRM}	20	30	40	50	60	80	100	150	200	V
Maximum RMS voltage	V _{RMS}	14	21	28	35	42	56	70	105	140	V
Maximum DC blocking voltage	V _{DC}	20	30	40	50	60	80	100	150	200	V
Maximum average forward rectified current	I <sub(av)< sub=""></sub(av)<>	1.0									A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	25									A
Maximum instantaneous forward voltage at 1.0A	V _F	0.55			0.70		0.85		0.9		V
Maximum DC reverse current at rated DC blocking voltage T _A =25℃ T _A =100℃	I _R	0.3 10.0					0.2 5.0		0.1 2.0		mA
Typical junction capacitance (NOTE 1)	C _J	110			80						pF
Typical thermal resistance (NOTE 2)	R _{θJA}	90.0									℃/W
Operating junction temperature range	T _J	-55 to +150									℃
Storage temperature range	T _{STG}	-55 to +150									℃

Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. P.C.B. mounted with 2.0"x2.0" (5.0x5.0cm) copper pad areas

Typical Characteristics

Fig.1 Forward Current Derating Curve

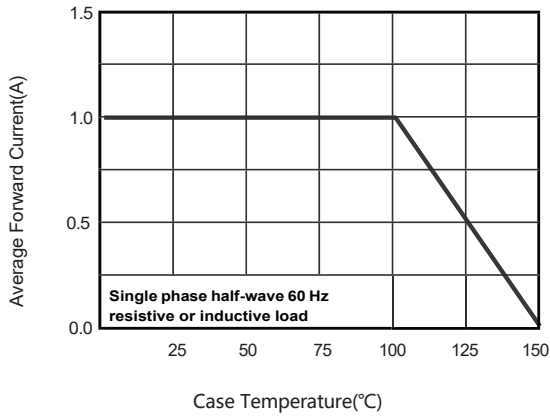


Fig.2 Typical Reverse Characteristics

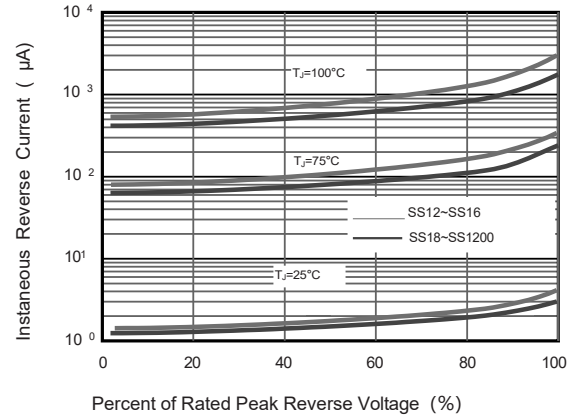


Fig.3 Typical Forward Characteristic

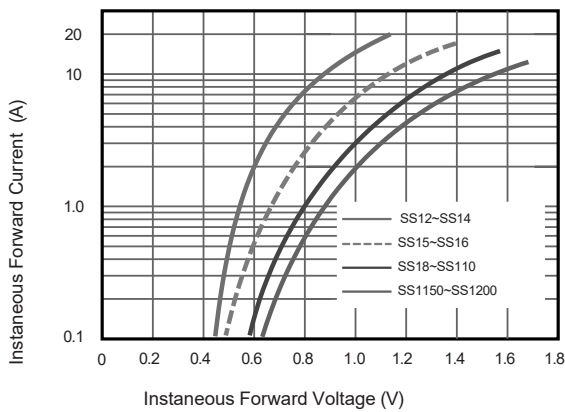


Fig.4 Typical Junction Capacitance

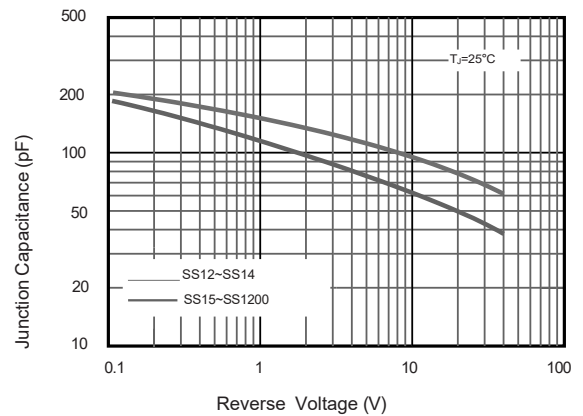


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

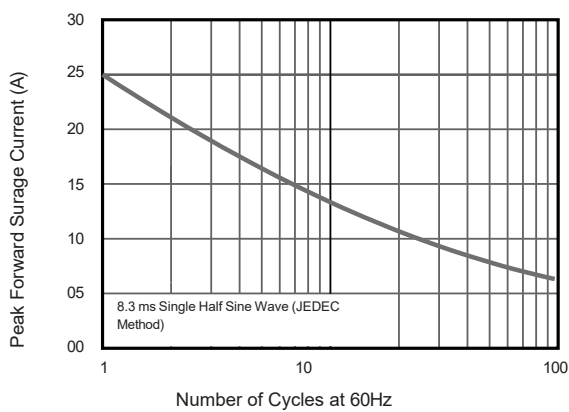
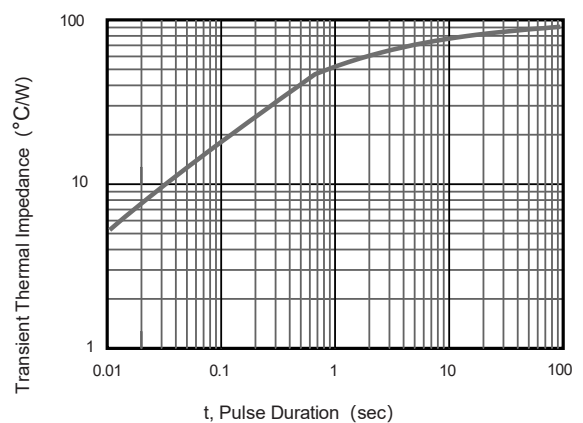


Fig.6 Typical Transient Thermal Impedance



The curve above is for reference only.