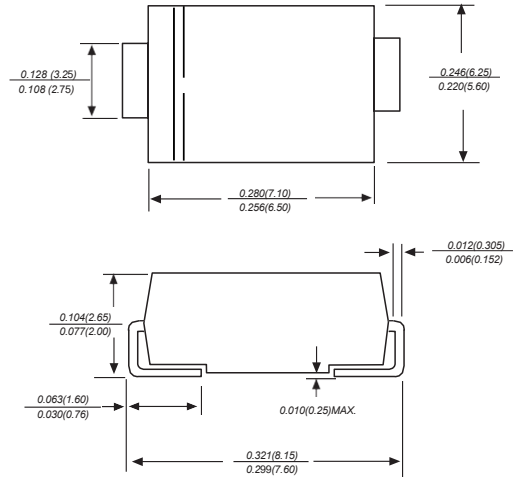


SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

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-214AB/SMC



Dimensions in inches and (millimeters)

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	SS82C	SS84C	SS86C	SS88C	SS810C	SS815C	SS820C	UNITS
Marking Code									
Maximum repetitive peak reverse voltage	V_{RRM}	20	40	60	80	100	150	200	V
Maximum RMS voltage	V_{RMS}	14	28	42	56	70	105	140	V
Maximum DC blocking voltage	V_{DC}	20	40	60	80	100	150	200	V
Maximum average forward rectified current at TL (see fig.1)	I_{AV}	8.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	150							A
Maximum instantaneous forward voltage at 8.0A	V_F	0.45	0.55	0.70	0.85	0.95			V
Maximum DC reverse current at rated DC blocking voltage $T_A=25^{\circ}C$ $T_A=100^{\circ}C$	I_R	1.0 50							mA
Typical junction capacitance (NOTE 1)	C_J	900 600							pF
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	35							$^{\circ}C/W$
Operating junction temperature range	T_J	-55 to +150							$^{\circ}C$
Storage temperature range	T_{STG}	-55 to +150							$^{\circ}C$

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

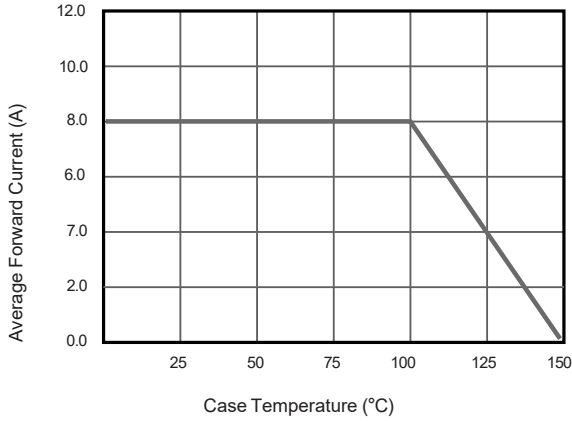


Fig.2 Typical Reverse Characteristics

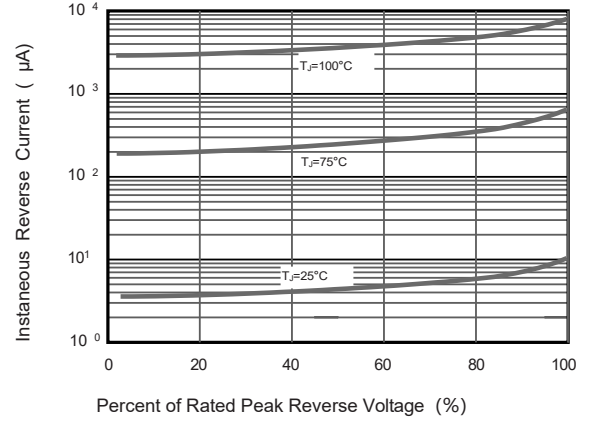


Fig.3 Typical Forward Characteristic

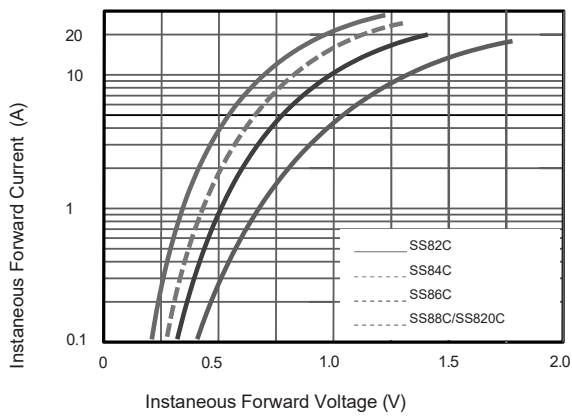


Fig.4 Typical Junction Capacitance

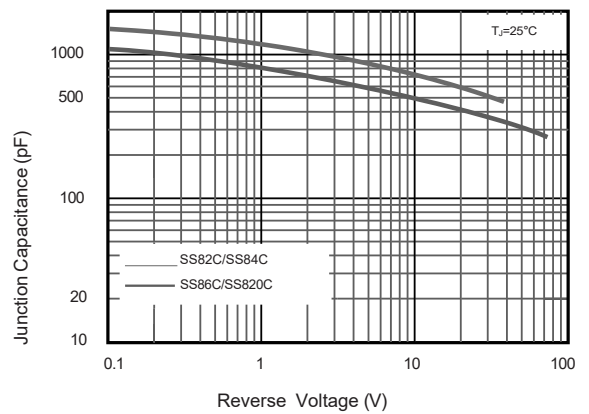


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

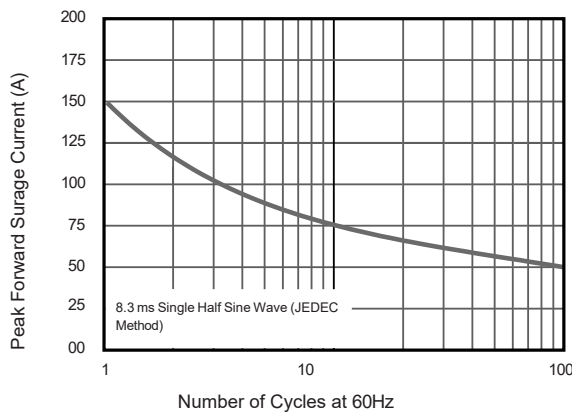
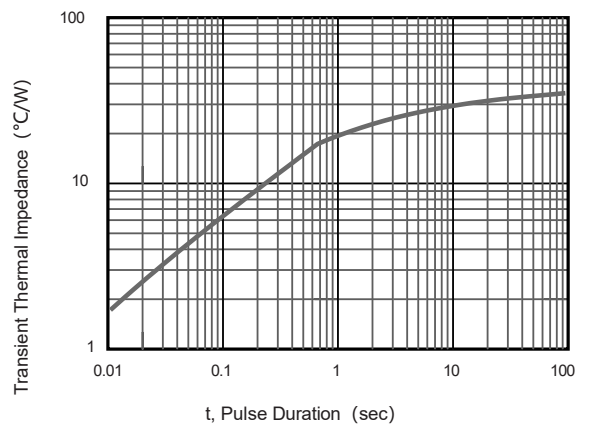


Fig.6 Typical Transient Thermal Impedance



The curve above is for reference only.