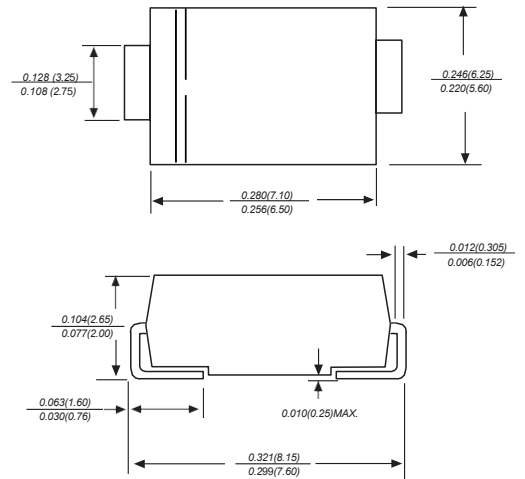


SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

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	SK82C	SK83C	SK835C	SK84C	SK845C	SK86C	SK88C	SK810C	UNITS
Marking Code										
Maximum repetitive peak reverse voltage	V _{RRM}	20	30	35	40	45	60	80	100	V
Maximum RMS voltage	V _{RMS}	14	21	24.5	28	31.5	42	56	70	V
Maximum DC blocking voltage	V _{DC}	20	30	35	40	45	60	80	100	V
Maximum average forward rectified current	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		V
Maximum DC reverse current T _A =25℃ at rated DC blocking voltage T _A =100℃	I _R	1.0 50								mA
Typical junction capacitance (NOTE 1)	C _J	900				600				pF
Typical thermal resistance (NOTE 2)	R _{θJA}	35								℃/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

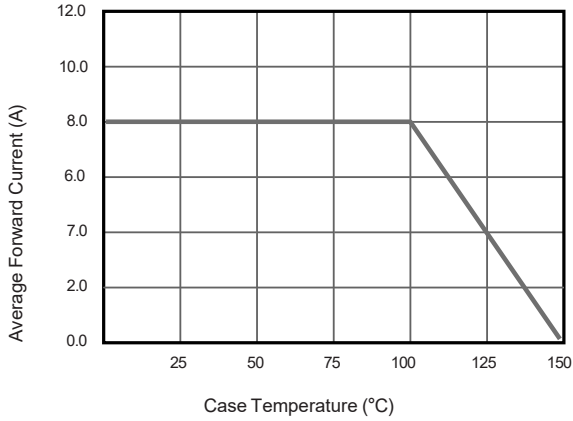


Fig.2 Typical Reverse Characteristics

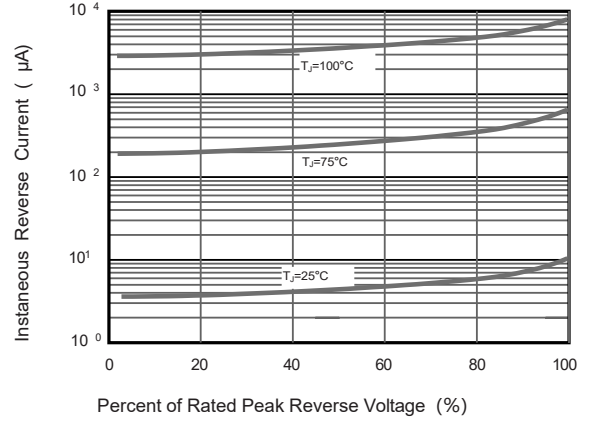


Fig.3 Typical Forward Characteristic

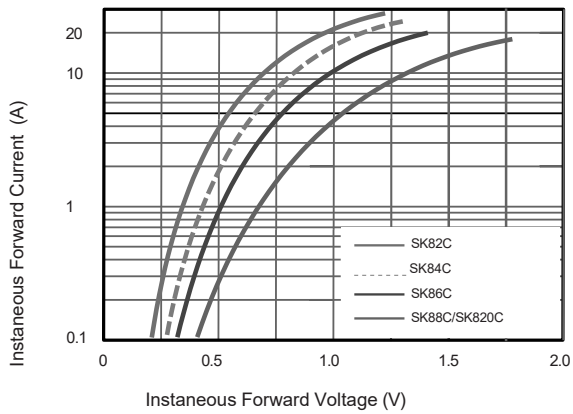


Fig.4 Typical Junction Capacitance

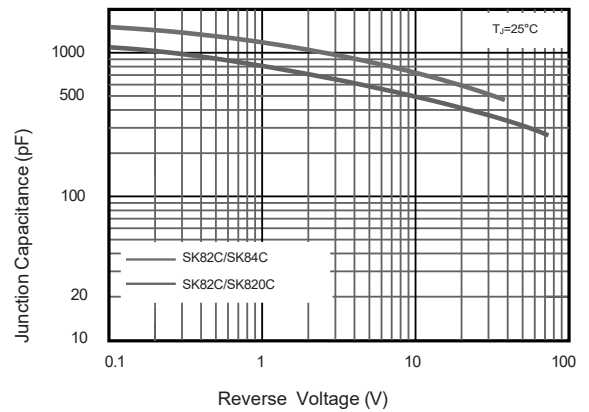


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

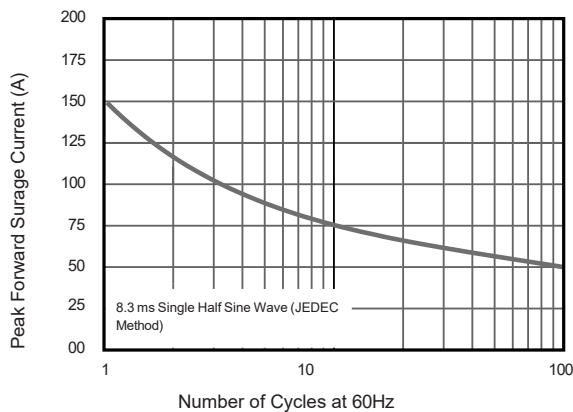
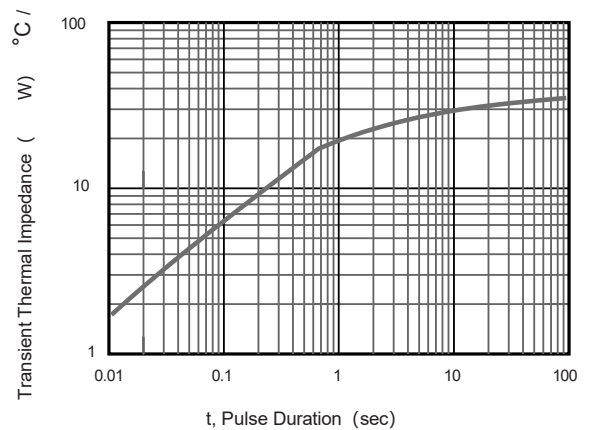


Fig.6- Typical Transient Thermal Impedance



The curve above is for reference only.