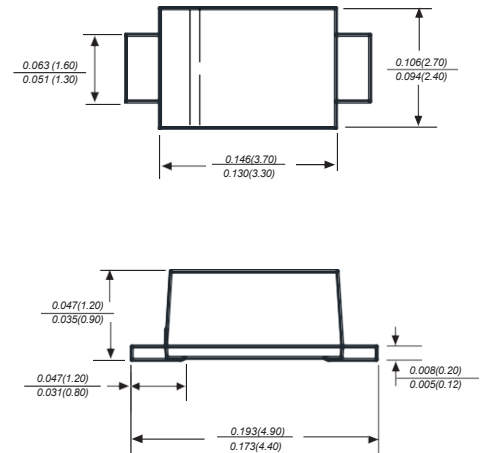


SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

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:
260 °C/10 seconds at terminals

SMAF



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	SS12F	SS13F	SS14F	SS15F	SS16F	SS18F	SS110F	SS1150F	SS1200F	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 at TL(see fig.1)	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		0.90		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}	95.0									℃/W
Operating junction temperature range	T _J	-55 to +125				-55to +150					℃
Storage temperature range	T _{STG}	-55to +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

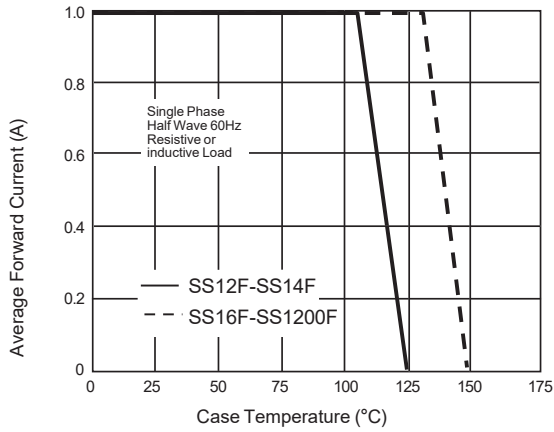


Fig.2 Typical Reverse Characteristics

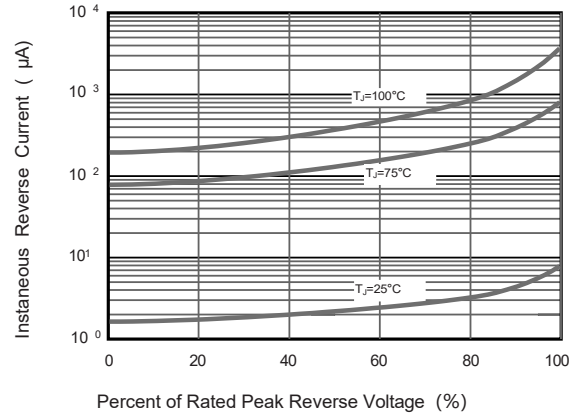


Fig.3 Typical Forward Characteristic

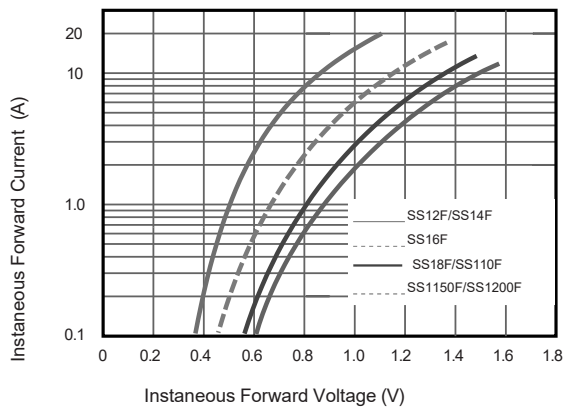


Fig.4 Typical Junction Capacitance

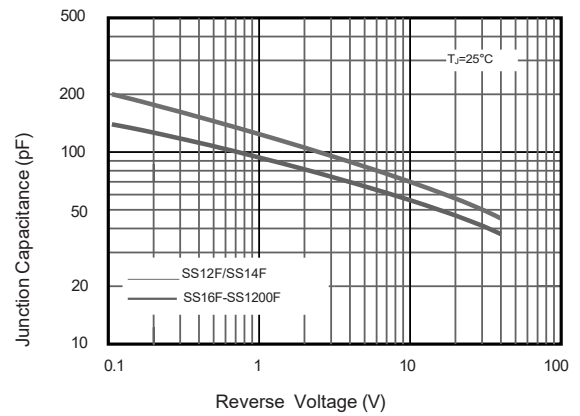


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

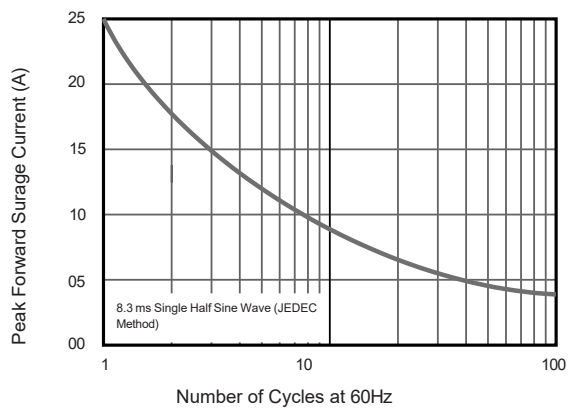
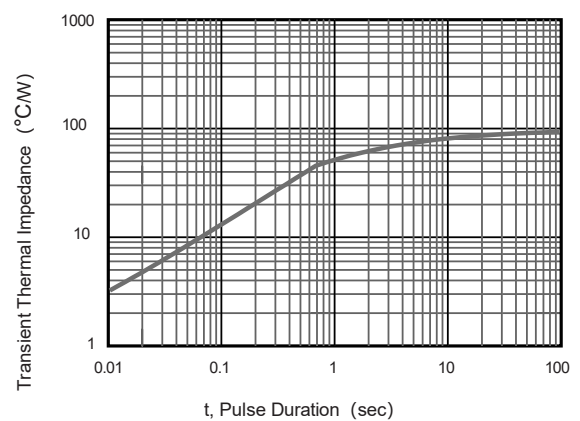


Fig.6 Typical Transient Thermal Impedance



The curve above is for reference only.