SS23-SMA-40M

Reverse Voltage - 20 to 200 Volts Forward Current - 2.0 Ampere

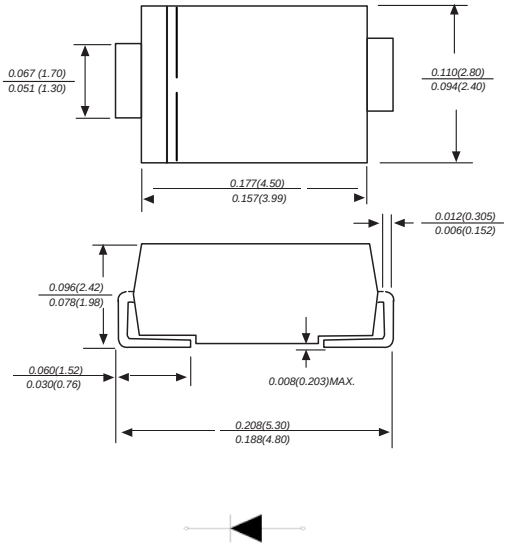
SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

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

RoHS COMPLIANT



Dimensions in inches and (millimeters)

Mechanical Data

Case : JEDEC DO-214AC/SMA molded plastic body
Terminals : Solderable per MIL-STD-750,Method 2026
Polarity : Color band denotes cathode end Mounting Position : Any
Weight : 0.0021ounce, 0.06grams

Maximum Ratings And Electrical Characteristics

Ratings at 25℃ ambient temperature unless otherwise specified.
Single phase half-wave 60Hz,resistive or inductive load,for capacitive load current derate by 20%.

Parameter / Marking Code	SYMBOLS	SS23-SMA-40M	UNITS
Maximum repetitive peak reverse voltage	V_{RMM}	30	V
Maximum RMS voltage	V_{RMS}	30	V
Maximum DC blocking voltage	V_{DC}	21	V
Maximum average forward rectified current	$I_{(AV)}$	2.0	A
Peak forward surge current 8.3ms single half sine-wave superimposed onrated load (JEDEC Method)	I_{FSM}	50	A
Maximum instantaneous forward voltage at 2.0A	V_F	0.55	V
Maximum DC reverse current T_A=25℃ at rated DCblocking voltage T_A=100℃	I_R	0.5 5	mA
Typical junction capacitance (NOTE 1)	C_J	220	pF
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	80.0	℃/W
Operating junction temperature range	T_J	-55 to +125	℃
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 Characterisitics

Fig.1 Forward Current Derating Curve

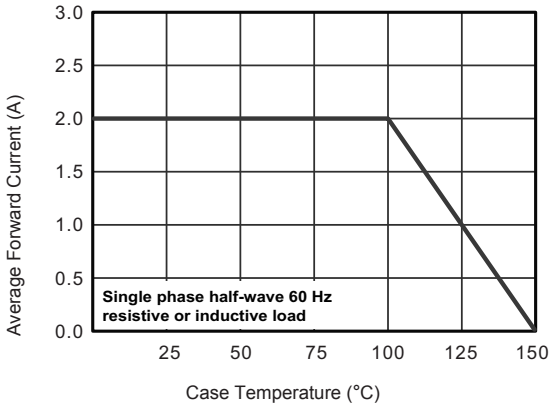


Fig.2 Typical Reverse Characteristics

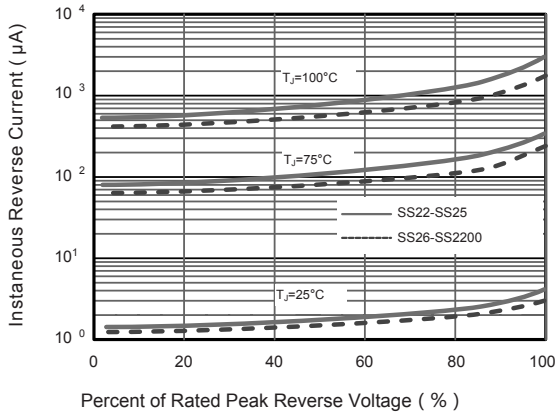


Fig.3 Typical Forward Characteristic

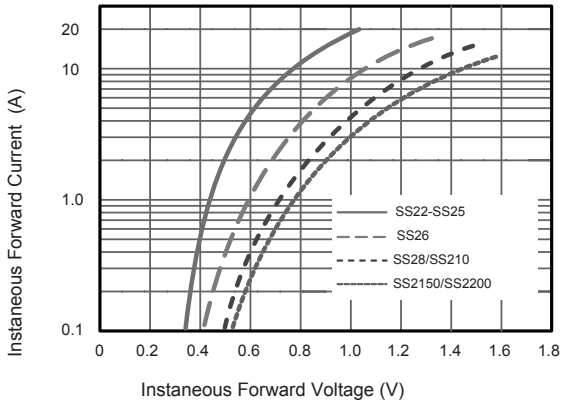


Fig.4 Typical Junction Capacitance

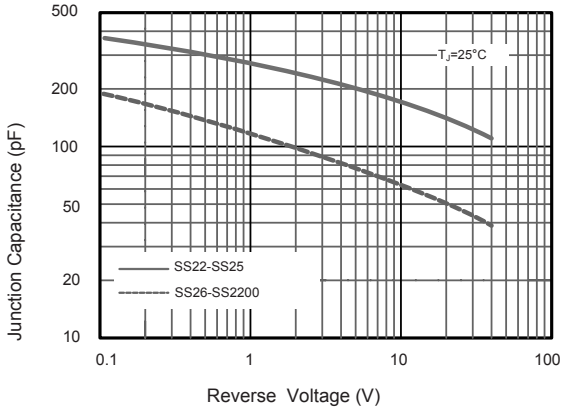


Fig.5 Maximum Non-Repetitive Peak Forward Surage Current

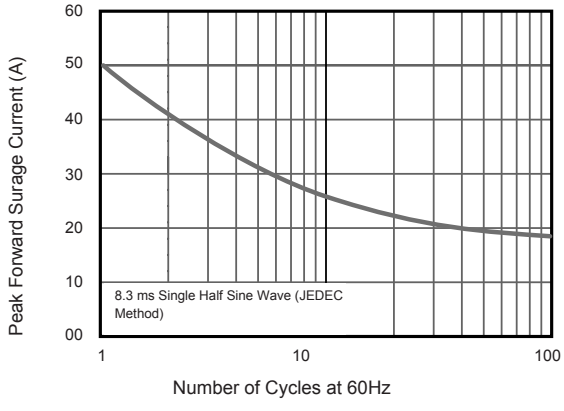
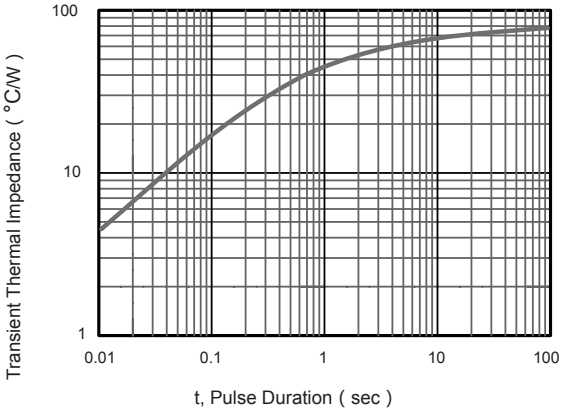


Fig.6- Typical Transient Thermal Impedance



The curve above is for reference only.