



SS52 THRU SS5200

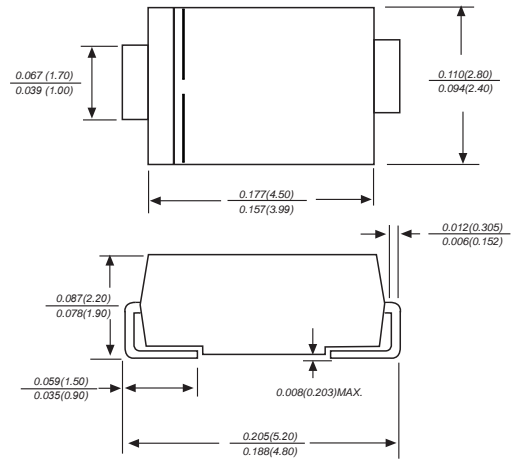
Reverse Voltage - 20 to 200 Volts Forward Current - 5.0 Ampere

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: 0.002 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	MDD SS52	MDD SS53	MDD SS54	MDD SS55	MDD SS56	MDD SS58	MDD SS510	MDD SS5150	MDD SS5200	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)<>	5.0									A	
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	120									A	
Maximum instantaneous forward voltage at 5.0A	V _F	0.55		0.70			0.85				V	
Maximum DC reverse current at rated DC blocking voltage T _A =25°C T _A =100°C	I _R	1.0 50									mA	
Typical junction capacitance (NOTE 1)	C _J	500				00						pF
Typical thermal resistance (NOTE 2)	R _{θJA}	60.0									°C/W	
Operating junction temperature range	T _J	-55 to +125									°C	
Storage temperature range	T _{STG}	-55 to +150									°C	

Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
 2. P.C.B. mounted with 'x' (5.0x5.0F m) copper pad areas



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Typical Characteristics

Fig.1 Forward Current Derating Curve

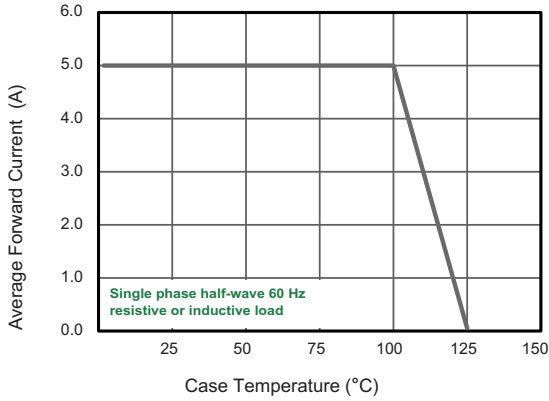


Fig.2 Typical Reverse Characteristics

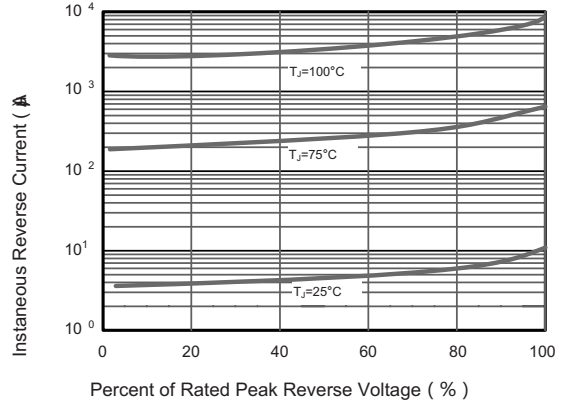


Fig.3 Typical Forward Characteristic

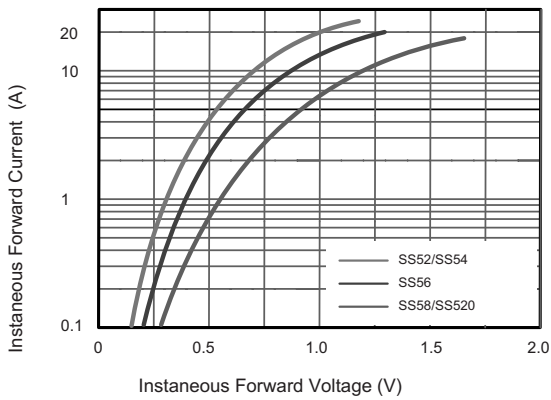


Fig.4 Typical Junction Capacitance

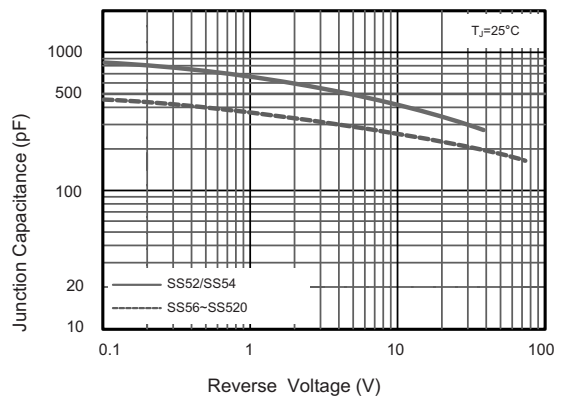


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

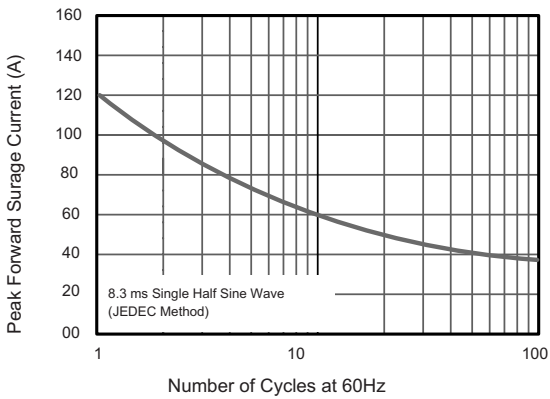
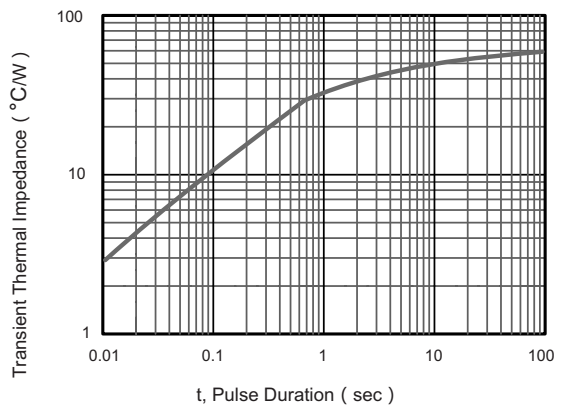


Fig.6 Typical Transient Thermal Impedance



The curve above is for reference only.

