

SCHOTTKY BARRIER RECTIFIERS

PRODUCT SUMMARY

2.0 AMPS Surface Mount

FEATURES

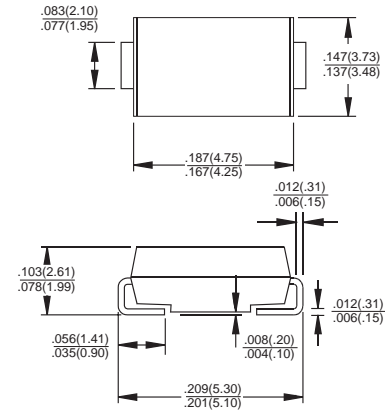
For surface mounted application
 Easy pick and place
 Metal to silicon rectifier, majority carrier conduction
 Low power loss, high efficiency
 High current capability, low VF
 High surge current capability
 Plastic material used carriers Underwriters
 Laboratory Classification 94V-0
 Epitaxial construction
 High temperature soldering:
 260 °C / 10 seconds at terminals

MECHANICAL DATA

Case: Molded plastic
 Terminals: Pure tin plated, lead free.
 Polarity: Indicated by cathode band
 Packaging: 12mm tape per EIA STD RS-481
 Weight: 0.093gram



SMB/DO-214AA



Dimensions in inches and (millimeters)



Pb-free; RoHS-compliant

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

Type Number	Symbol	SS 22	SS 23	SS 24	SS 25	SS 26	SS 29	SS 210	SS 215	Units
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	20	30	40	50	60	90	100	150	V
Maximum RMS Voltage	V _{RMS}	14	21	28	35	42	63	70	105	V
Maximum DC Blocking Voltage	V _{DC}	20	30	40	50	60	90	100	150	V
Maximum Average Forward Rectified Current at T _L (See Fig. 1)	I _(AV)	2.0								A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	50								A
Maximum Instantaneous Forward Voltage (Note 1) IF= 2.0A @ 25°C @ 100°C	V _F	0.5 0.4		0.70 0.65		0.85 0.70		0.95 0.80		V
Maximum DC Reverse Current @ T _A =25°C at Rated DC Blocking Voltage @ T _A =125°C	I _R	0.4					0.1			mA
		10			5.0					mA
Typical Junction Capacitance (Note 3)	C _j	130								pF
Typical Thermal Resistance (Note 2)	R _{θJL} R _{θJA}	17 75								°C/W
Operating Temperature Range	T _J	-65 to +125			-65 to +150					°C
Storage Temperature Range	T _{STG}	-65 to +150								°C

Notes: 1. Pulse Test with PW=300 usec, 1% Duty Cycle
 2. Measured on P.C.Board with 0.4" x 0.4"(10mm x 10mm) Copper Pad Areas.
 3. Measured at 1 MHz and Applied Reverse Voltage of 4.0V D.C.

RATINGS AND CHARACTERISTIC CURVES (SS22 THRU SS215)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

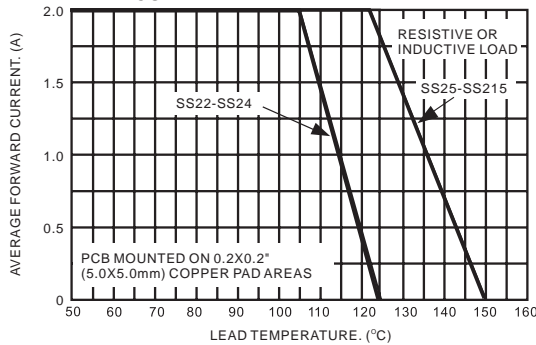


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

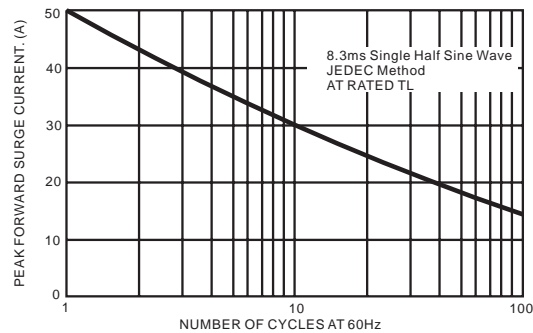


FIG.3- TYPICAL FORWARD CHARACTERISTICS

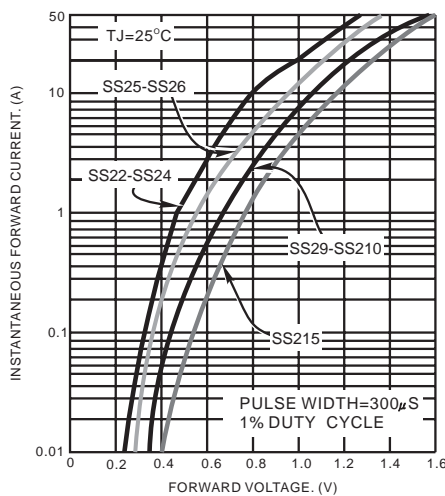


FIG.4-TYPICAL REVERSE CHARACTERISTICS

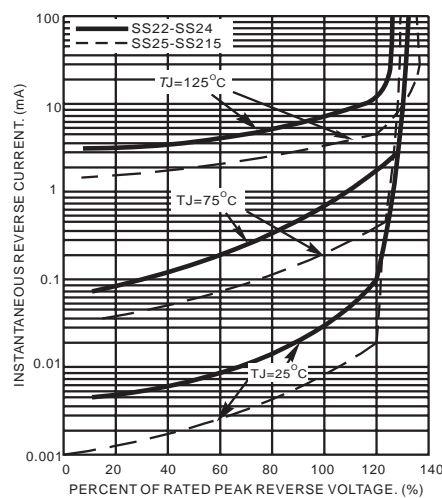


FIG.5-TYPICAL JUNCTION CAPACITANCE

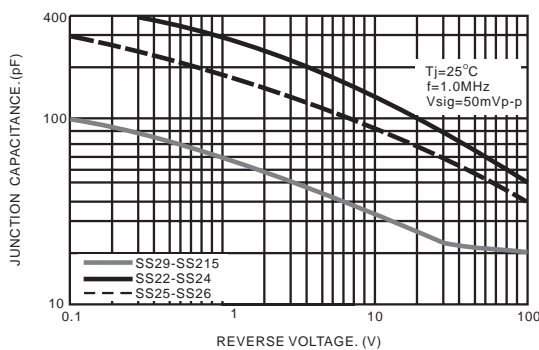
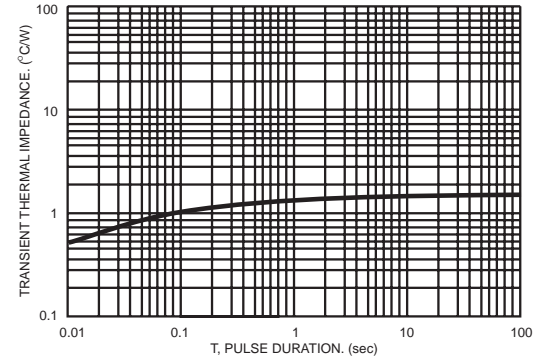


FIG.6- TYPICAL TRANSIENT THERMAL CHARACTERISTICS



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