

SCHOTTKY BARRIER RECTIFIERS

PRODUCT SUMMARY

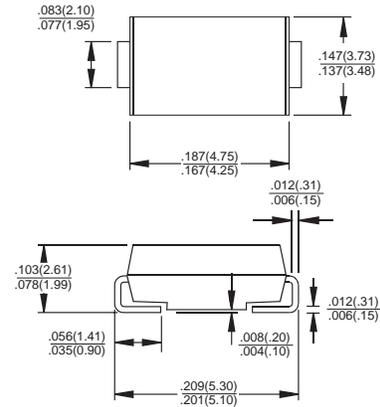
2.0 AMPS Surface Mount

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



SMB/DO-214AA



Dimensions in inches and (millimeters)

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



Pb-free; RoHS-compliant

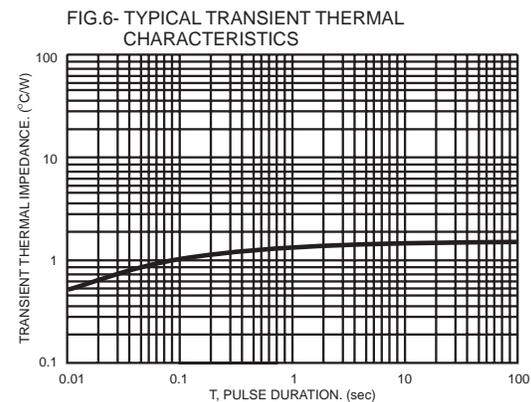
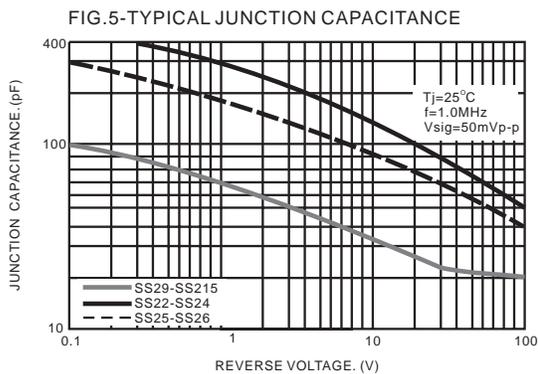
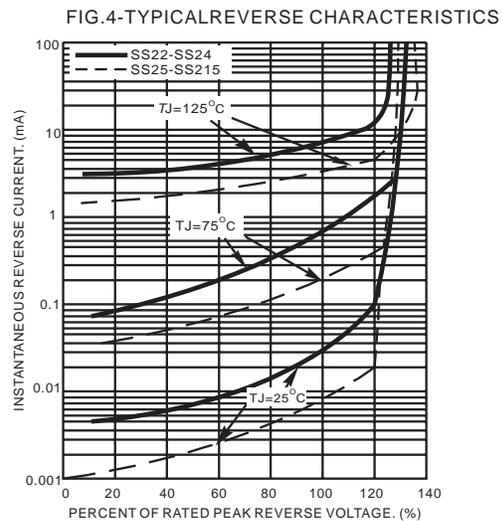
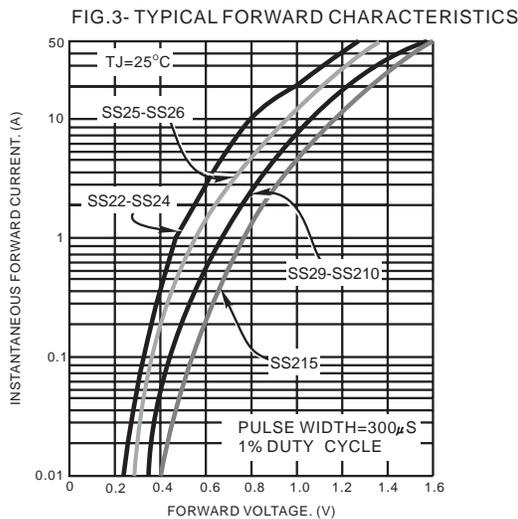
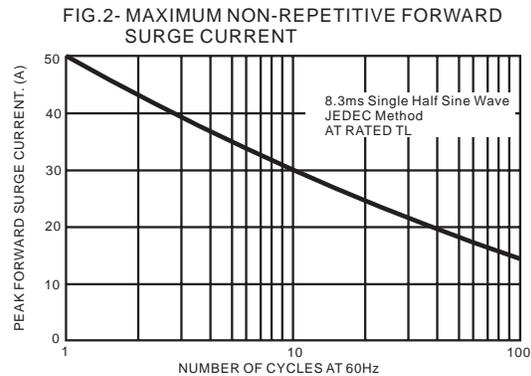
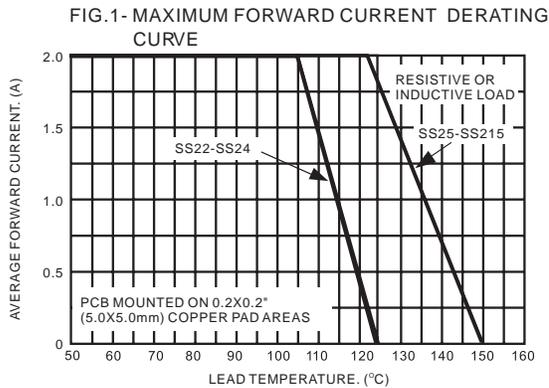
MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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 @ $T_A=25\text{ °C}$ at Rated DC Blocking Voltage @ $T_A=125\text{ °C}$	I_R	0.4				0.1				mA mA
Typical Junction Capacitance (Note 3)	C_j	130								pF
Typical Thermal Resistance (Note 2)	$R_{\theta JL}$ $R_{\theta JA}$	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)



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