

Pb Free Plating Product



SS52 thru SS515

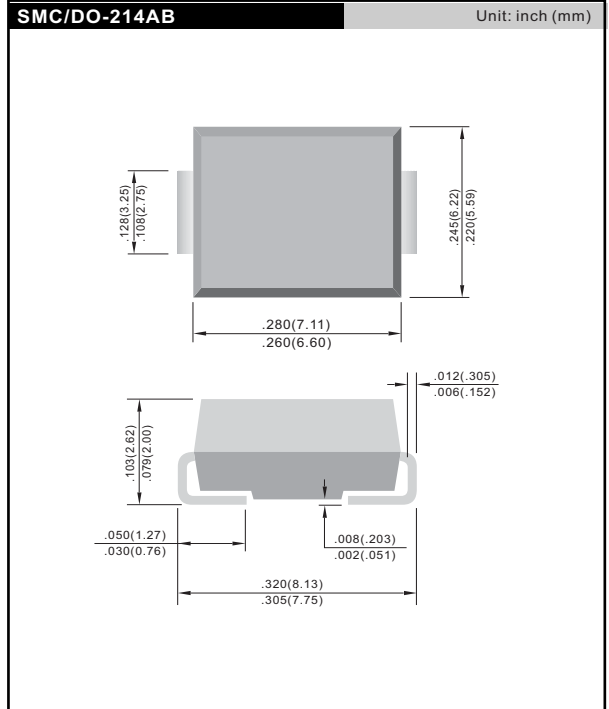
5.0 AMP. SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

Features

- ✧ For surface mounted application
- ✧ Metal to silicon rectifier, majority carrier conduction
- ✧ Low forward voltage drop
- ✧ Easy pick and place
- ✧ 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: 16mm tape per EIA STD RS-481
- ✧ Weight: 0.1 gram



Maximum Ratings and Electrical Characteristics

Rating 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 52	SS 53	SS 54	SS 55	SS 56	SS 59	SS 510	SS 515	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)	$I_{(AV)}$	5.0								A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	120								A
Maximum Instantaneous Forward Voltage @ 5.0A	V_F	0.55		0.75		0.85		0.95		V
Maximum DC Reverse Current (Note 1) @ $T_A=25^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_A=125^\circ\text{C}$	I_R	0.5				0.3				mA
		20		10		5.0			mA	
Typical Thermal Resistance (Note 2)	$R_{\theta JL}$	17								$^\circ\text{C/W}$
	$R_{\theta JA}$	55								
Operating Temperature Range	T_J	-55 to +125				-55 to +150				$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150								$^\circ\text{C}$

- Notes: 1. Pulse Test with PW=300 usec, 1% Duty Cycle
 2. Measured on P.C.Board with 0.6" x 0.6" (16mm x 16mm) Copper Pad Areas.

RATINGS AND CHARACTERISTIC CURVES (SS52 THRU SS515)

