

**TAYCHIPST**

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

SS52 THRU SS510

20V-100V 5.0A

**FEATURES**

- Metal-Semiconductor junction with gard ring
- Epitaxial construction
- Low forward voltage drop
- High current capability
- The plastic material carries UL recognition 94V-0
- For use in low vlotage, high frequency inverters, free wheeling, and polarity protection applications

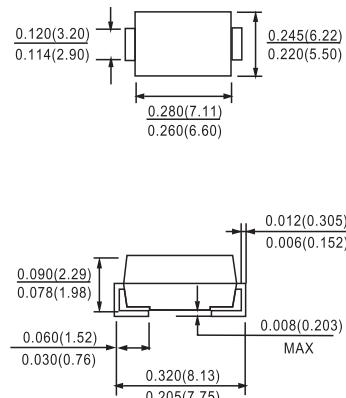
**MECHANICAL DATA**

Case Molded Plastic

Polarity:Color band denotes cathode

Weight: 0.007 ounces,0.21 grams

DO-214AB(SMC)



Dimensions in inches and (millimeters)

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave ,60Hz, resistive or inductive load.

For capacitive load, derate current by 20%

CHARACTERISTICS	SYMBOL	SS52	SS53	SS54	SS55	SS56	SS58	SS510	UNIT			
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	20	30	40	50	60	80	100	V			
Maximum RMS Voltage	V <sub>RMS</sub>	14	21	28	35	42	56	70	V			
Maximum DC Blocking Voltage	V <sub>DC</sub>	20	30	40	50	60	80	100	V			
Maximum Average Forward Rectified Current 0.375" (9.5mm) Lead Lengths @T <sub>L</sub> =95 °C	I <sub>(AV)</sub>	5.0						A				
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load(JEDEC Method)	I <sub>FSM</sub>	150						A				
Maximum Forward Voltage at 5.0A DC	V <sub>F</sub>	0.45	0.55	0.6	0.7	0.85			V			
Maximum DC Reverse Current @T <sub>J</sub> =25°C at Rated DC Bolcking Voltage @T <sub>J</sub> =100°C	I <sub>R</sub>	1.0 50						mA				
Typical Junction Capacitance (Note1)	C <sub>J</sub>	500			350			pF				
Typical Thermal Resistance (Note2)	R <sub>JA</sub>	15			10			°C/W				
Operating Temperature Range	T <sub>J</sub>	-55 to +150						°C				
Storage Temperature Range	T <sub>STG</sub>	-55 to +150						°C				

NOTES: 1.Measured at 1.0 MHz and applied reverse voltage of 4.0V DC

2.Thermal resistance junction to ambient,



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## RATINGS AND CHARACTERISTIC CURVES

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FIG. 1 FORWARD CURRENT DERATING CURVE

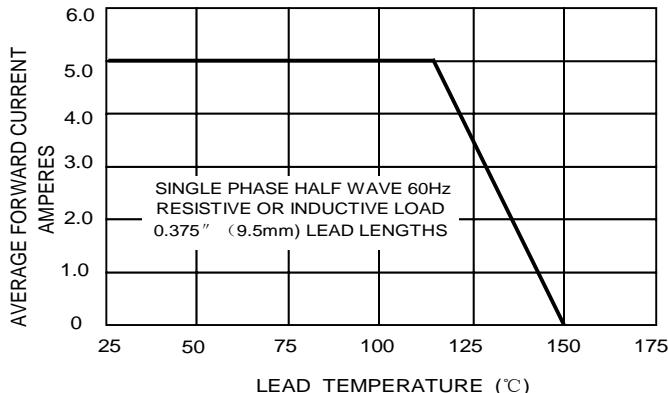


FIG. 2 MAXIMUM NON-REPETITIVE SURGE CURRENT

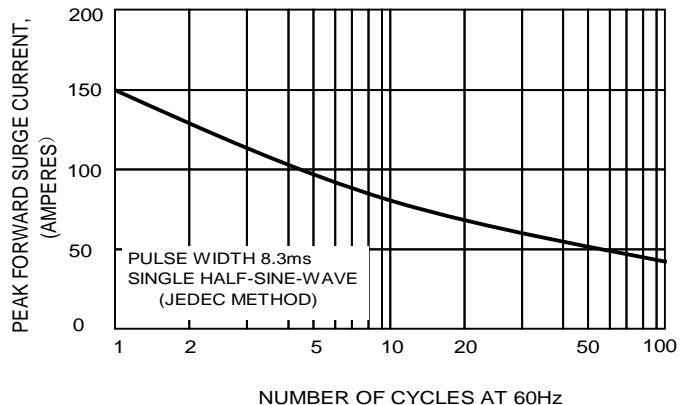


FIG.3 TYPICAL JUNCTION CAPACITANCE

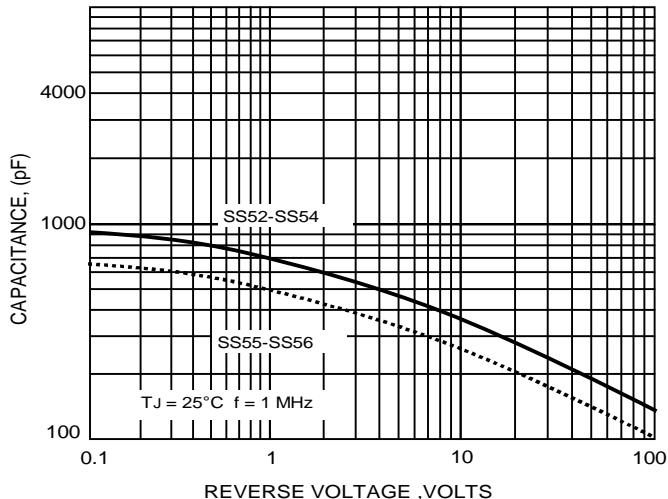


FIG.4-TYPICAL FORWARD CHARACTERISTICS

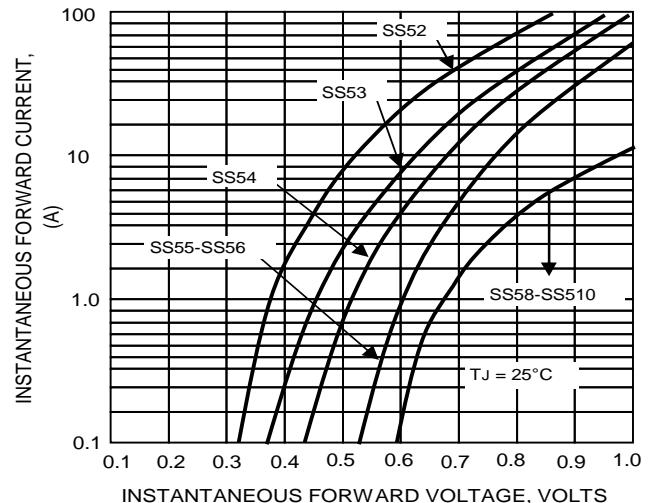


FIG.2-TYPICAL REVERE CHARACTERISTICS

