



SS52 THRU SS510

5.0AMP.SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

Voltage Range
20 to 100 Volts
Current
5.0Amperes

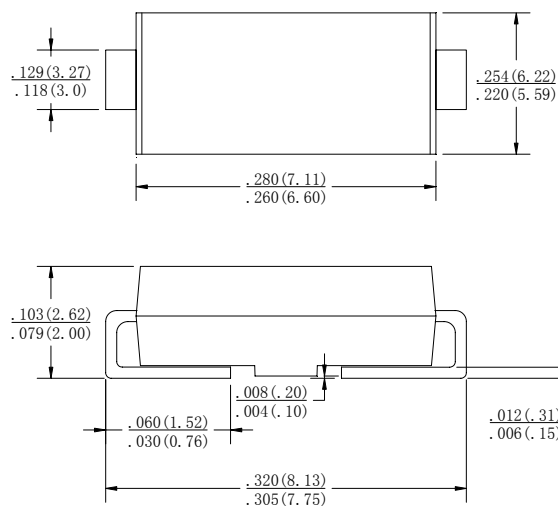
Features

- 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:Solder plated
- Polarity:Indicated by cathode band
- Packaging:16mm tape EIA STD RS-481
- Weight:0.21gram

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%

Type Number		SS52	SS53	SS54	SS55	SS56	SS59	SS510	UNITS
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	20	30	40	50	60	90	100	V
Maximum RMS Voltage	V _{RMS}	14	21	28	35	42	63	70	V
Maximum DC Blocking Voltage	V _{DC}	20	30	40	50	60	90	100	V
Maximum Average Forward Rectified Current @T _L =95 °C	I _{F(AV)}	5.0							A
Peak Forward Surge Current,8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	150							A
Maximum Instantaneous Forward Voltage (Note@1.0 A	V _F	0.45	0.55	0.60	0.70		0.85		V
Maximum DC Reverse Crrnt @ T _A =25°C At Rated DC Blocking Voltage @ T _A =125°C	I _R	1.0 50.0							mA
Typical Thermal Resistance (Note)	R θ JA	15			10				°C /W
Operating Junction Temperature Range	T _J	-55 to+150							°C
Storage Temperature Ranage	T _{STG}	-55 to+150							°C

NOTE: Thermal resistance junction to ambient.

RATING AND CHARACTERISTIC CURVES SS52 THRU SS510



FIG.1-MAXIMUM NONO-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMMENT

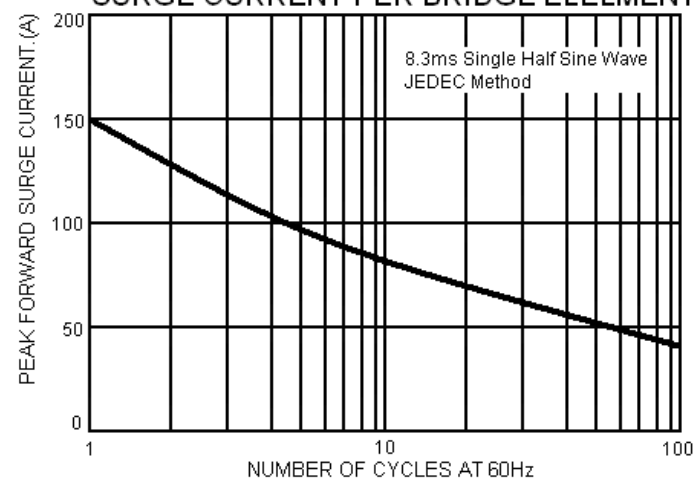


FIG.2-MAXIMUM FORWARD CURRENT DERATING CURVE

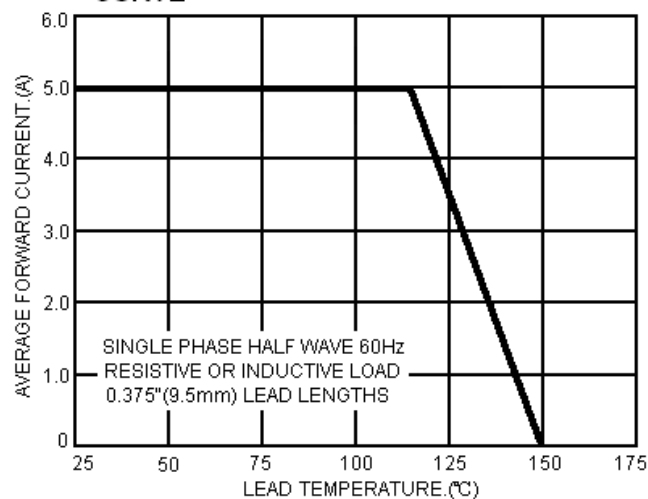


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

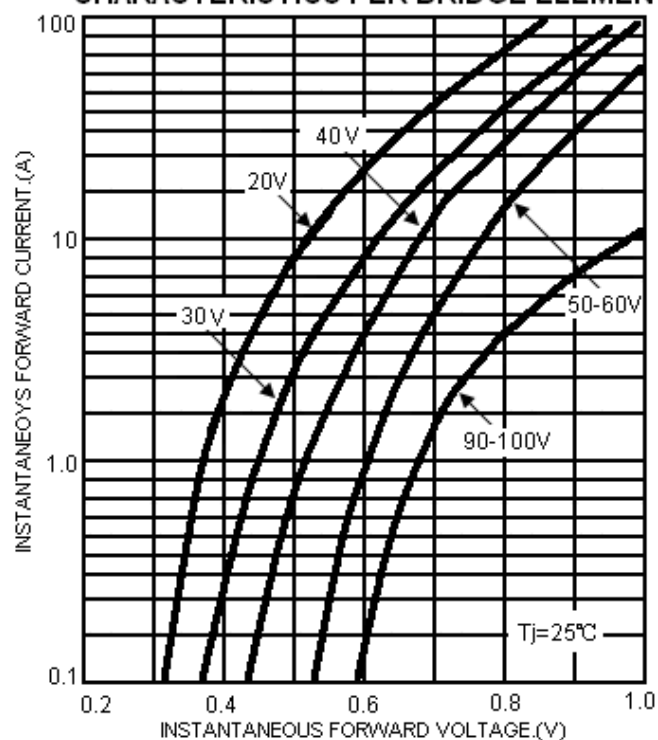


FIG.4-TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

