SS52 THRU SS520

5.0 AMP SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

VOLTAGE RANGE
20 to200 Volts
CURRENT
5.0 Ampere

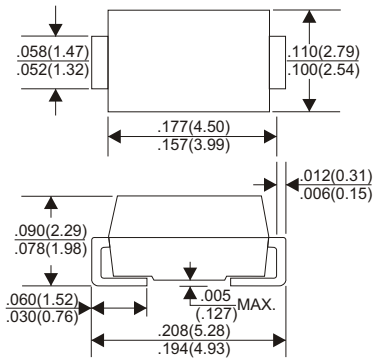
FEATURES

* Low forward voltage drop
* High current capability
* High reliability
* High surge current capability
* Epitaxial construction

MECHANICAL DATA

* Case: Molded plastic
* Epoxy: UL 94V-0 rate flame retardant
* Lead: Axial leads, solderable per MIL-STD-202, method 208 guranteed
* Polarity: Color band denotes cathode end
* Mounting position: Any
* Weight: 0.093 grams
* Both normal and Pb free product are available:
* Normal:80~95%Sn,5~20%Pb
* Pb free:99 Sn above can meet Rohs enviroment substance directive request

DO-214AC



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25˚C ambient temperature uniess otherwies specified.
Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

TYPE NUMBER	SS52	SS54	SS56	SS58	SS510	SS515	SS520	UNITS
Maximum Recurrent Peak Reverse Voltage	20	40	60	80	100	150	200	V
Maximum RMS Voltage	14	28	42	56	70	105	140	V
Maximum DC Blocking Voltage	20	40	60	80	100	150	200	V
Maximum Average Forward Rectified Current See Fig. 1	5.0							V
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	150							A
Maximum Instantaneous Forward Voltage at 5.0A	0.55		0.70	0.85				V
Maximum DC Reverse Current Ta=25˚C	0.2							mA
at Rated DC Blocking Voltage Ta=100˚C	20							mA
Typical Junction Capacitance (Note1)	380							pF
Typical Thermal Resistance R JA (Note 2)	10							˚C/W
Operating Temperature Range Tj	-65 — +125		-65 — +150					˚C
Storage Temperature Range TSTG	-65 — +150							˚C

NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

2. Thermal Resistance Junction to Ambient.

RATING AND CHARACTERISTIC CURVES (SS52 THRU S520)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

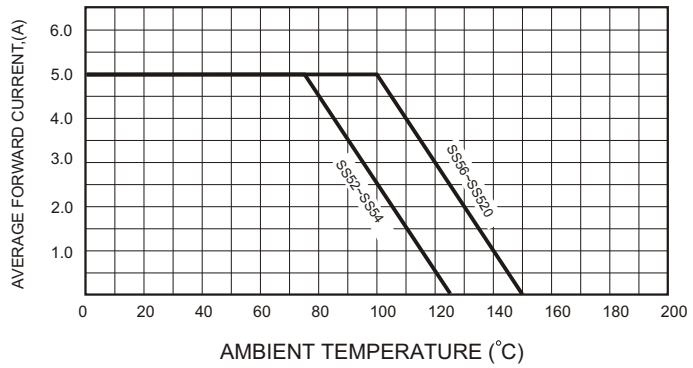


FIG.2-TYPICAL FORWARD CHARACTERISTICS

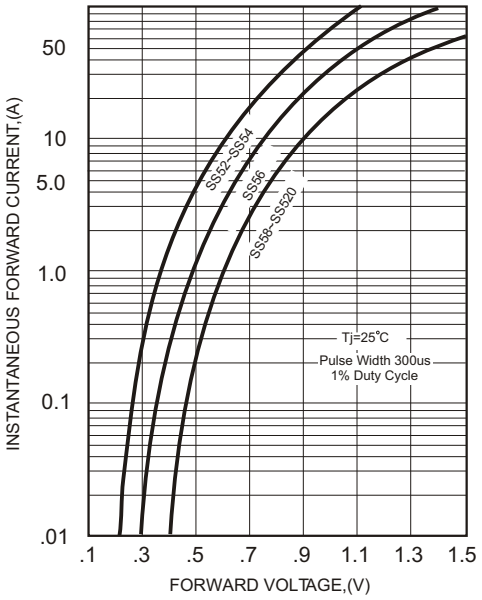


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

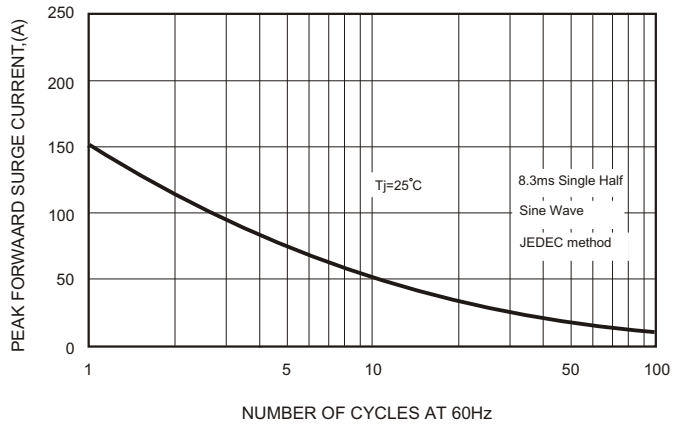


FIG.4-TYPICAL JUNCTION CAPACITANCE

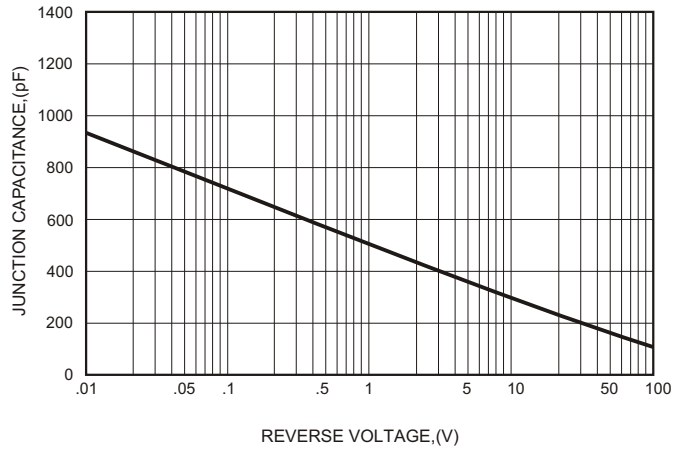


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

