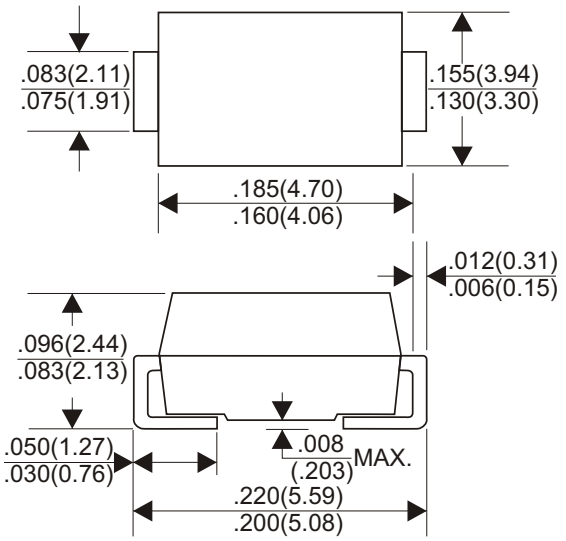
SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

SS52 - SS510

DO-214AA(SMB)



Dimensions in inches and (millimeters)

FEATURES

* Ideal for surface mount applications
* Easy pick and place
* Built-in strain relief
* Low forward voltage drop

MECHANICAL DATA

* Case: Molded plastic
* Epoxy: UL 94V-0 rate flame retardant
* Metallurgically bonded construction
* Polarity: Color band denotes cathode end
* Mounting position: Any
* Weight: 0.093 grams

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	SS53	SS54	SS55	SS56	SS58	SS59	SS510	UNITS
Maximum Recurrent Peak Reverse Voltage	20	30	40	50	60	80	90	100	V
Maximum RMS Voltage	14	21	28	35	42	56	63	70	V
Maximum DC Blocking Voltage	20	30	40	50	60	80	90	100	V
Maximum Average Forward Rectified Current	5.0								A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	120								A
Maximum Instantaneous Forward Voltage at 5.0A	0.55			0.70		0.85			V
Maximum DC Reverse Current Ta=25℃	0.1					0.02			mA
at Rated DC Blocking Voltage Ta=100℃	5					2			mA
Typical Junction Capacitance (Note1)	380								pF
Typical Thermal Resistance $R_{\theta JA}$ (Note 2)	55								℃/W
Operating Temperature Range T_J	-65 — +150								℃
Storage Temperature Range T_{STG}	-65 — +150								℃

NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. P.C.B. mounted with 0.4x0.4 (10x10mm) copper pad areas

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

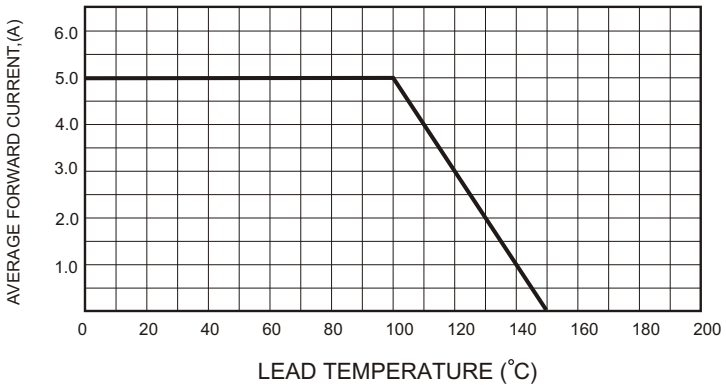


FIG.2-TYPICAL FORWARD CHARACTERISTICS

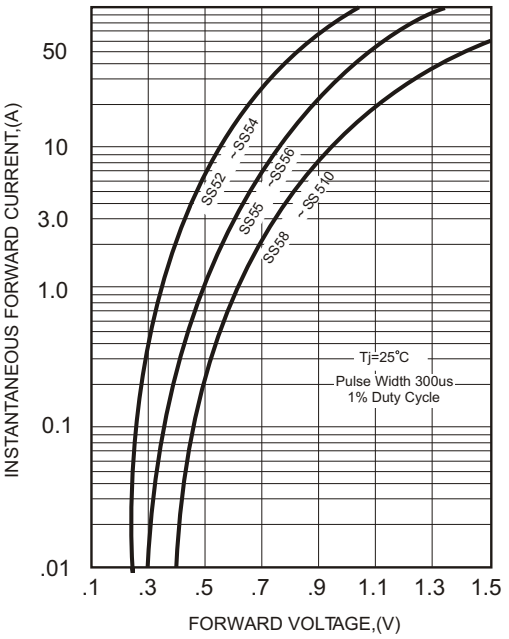


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

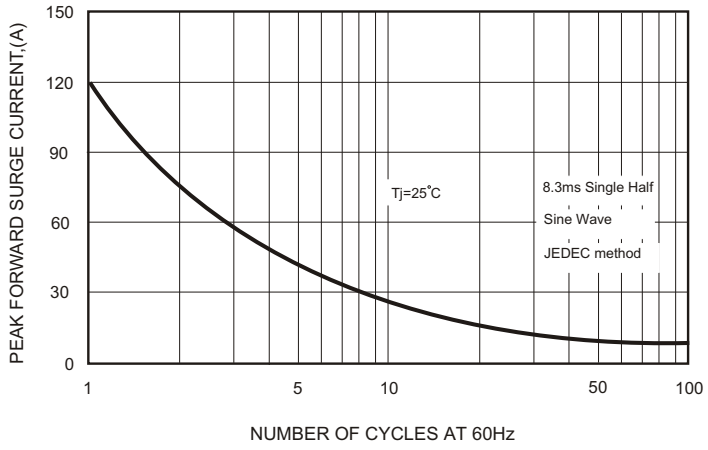
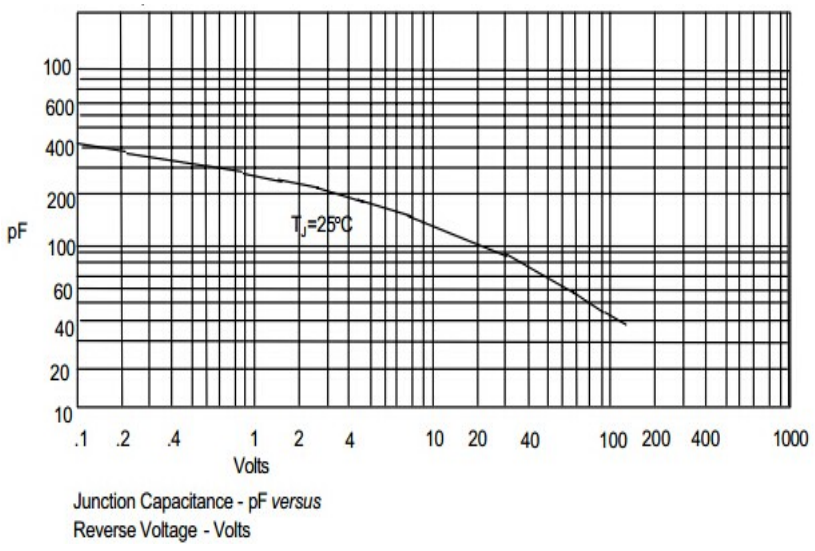


FIG.4-TYPICAL JUNCTION CAPACITANCE



Junction Capacitance - pF *versus*
Reverse Voltage - Volts

FIG.5 - TYPICAL REVERSE CHARACTERISTICS