DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

SS12
THRU
SS18

TECHNICAL SPECIFICATIONS OF SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE - 20 to 80 Volts *CURRENT - 1.0 Ampere*

FEATURES

* Ideal for surface mounted applications
* Low leakage current
* Glass passivated junction

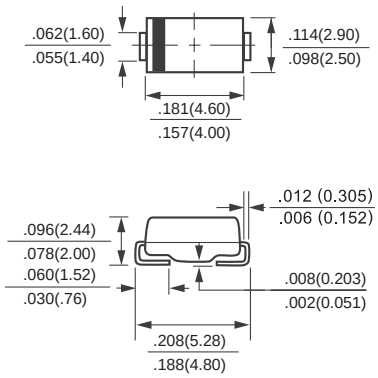
MECHANICAL DATA

* Case: Molded plastic
* Epoxy: UL 94V-0 rate flame retardant
*Terminals: Solder plated solderable per MIL-STD-750, Method 2026
* Polarity: As marked
* Mounting position: Any
* Weight: 0.064 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings 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%.

SMA (DO-214AC)



Dimensions in inches and (millimeters)

		SYMBOL	SS12	SS13	SS14	SS15	SS16	SS18	UNITS
Maximum Recurrent Peak Reverse Voltage		V_{RRM}	20	30	40	50	60	80	Volts
Maximum RMS Voltage		V_{RMS}	14	21	28	35	42	56	Volts
Maximum DC Blocking Voltage		V_{DC}	20	30	40	50	60	80	Volts
Maximum Average Forward Rectified Current at Derating Lead Temperature		I_O	1.0						Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)		I_{FSM}	30						Amps
Maximum Instantaneous Forward Voltage at 1.0A DC		V_F	0.55		0.70		0.85		Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	@T_A = 25°C	I_R	1.0						mAmps
	@T_A = 100°C		20						
Typical Thermal Resistance (Note 1)		$R_{\theta JA}$	88						°C/W
Typical Junction Capacitance (Note 2)		C_J	110						pF
Operating Temperature Range		T_J	-65 to + 125						°C
Storage Temperature Range		T_{STG}	-65 to + 150						°C

NOTES : 1. Thermal Resistance (Junction to Ambient).
2. Measured at 1 MHz and applied reverse voltage of 4.0 volts.
3. P.C.B Mounted with 0.2X0.2*(5.0X5.0mm ^{2}) copper pad area.

NEXT EXIT

RATING AND CHARACTERISTIC CURVES (SS12 THRU SS18)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

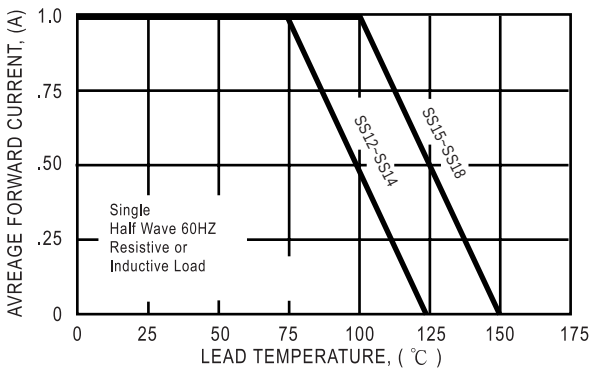


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARCTERISTICS

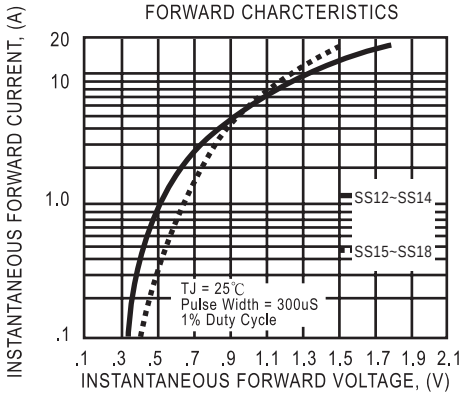


FIG. 3A - TYPICAL REVERSE CHARACTERISTICS

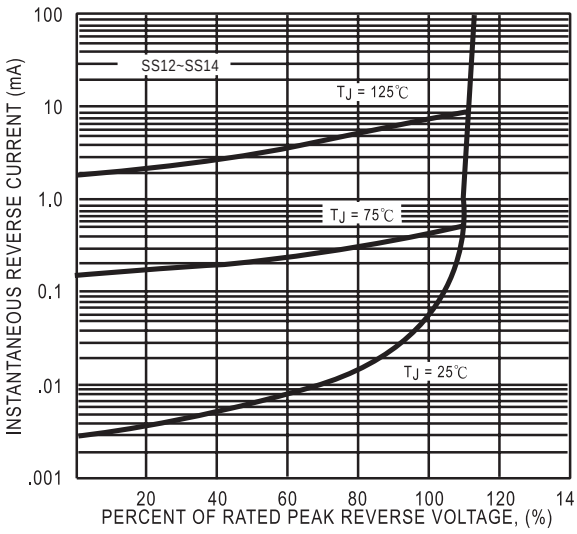


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

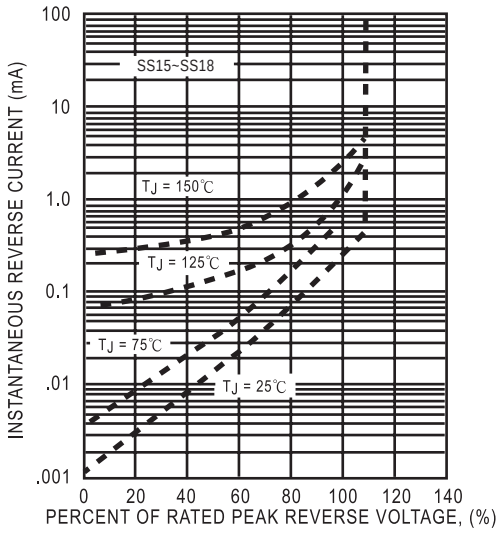


FIG. 4 - TYPICAL JUNCTION CAPACITANCE

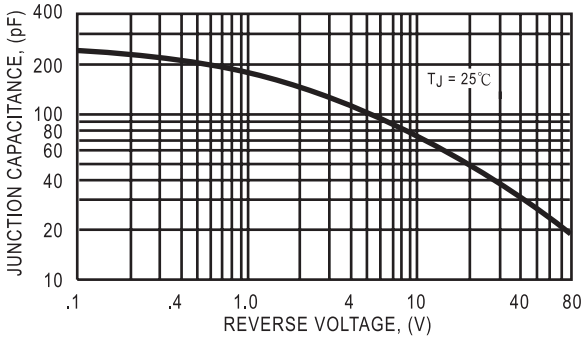


FIG. 5 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT