



DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

SS0520
THRU
SS0540

TECHNICAL SPECIFICATIONS OF SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE - 20 to 40 Volts

CURRENT - 0.5 Ampere

FEATURES

- * For general purpose applications
- * Low turn-on voltage
- * Fast switching time
- * Protected by a PN junction guard ring against excessive voltage, such as electrostatic discharge(ESD)
- * MARKING: SS0520:SD
SS0530:SE
SS0540:SF

MECHANICAL DATA

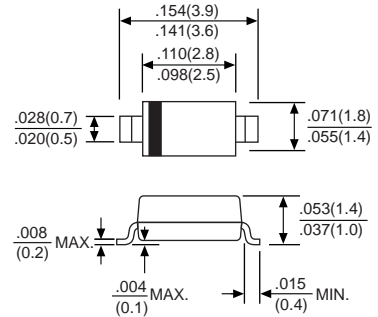
- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Terminals: Solder plated, solderable per MIL-STD-202E, Method 208 guaranteed
- * Mounting position: Any
- * Weight: 0.008 grams Approx.

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.



SOD-123



Dimensions in inches and (millimeters)

	SYMBOL	SS0520	SS0530	SS0540	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	20	30	40	Volts
Maximum RMS Voltage	V _{RMS}	14	21	28	Volts
Maximum DC Blocking Voltage	V _{DC}	20	30	40	Volts
Maximum Average Forward Rectified Current at T _A =75°C	I _O	0.5			Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	5.5			Amps
Maximum Instantaneous Forward Voltage	@ I _F =0.5A	0.385	0.430	0.510	Volts
	@ I _F =1A	-	-	0.620	
Maximum DC Reverse Current at Rated DC Blocking Voltage	I _R	0.25	0.13	0.02	mAmps
Typical Thermal Resistance (Note1)	R _{θJA}	244			°C/W
Typical Junction Capacitance (Note 2)	C _J	50			pF
Storage Operating Temperature Range	T _J , T _{STG}	-55 to + 125			°C

Note: 1. Terminals maintained at specified at ambient temperature.
2. Measured at 1 MHz and applied reverse voltage of 0 volts.

RATING AND CHARACTERISTIC CURVES (SS0520 THRU SS0540)

FIG. 1
TYPICAL FORWARD CURRENT
DERATING CURVE

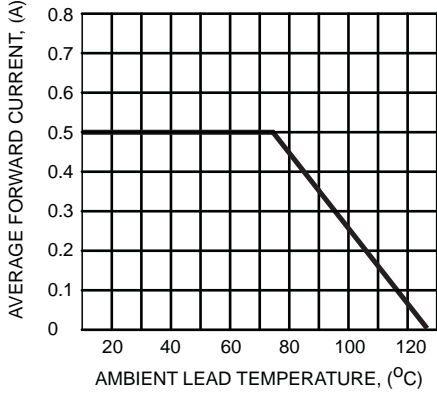


FIG. 2
TYPICAL INSTANTANEOUS FORWARD
CHARACTERISTICS

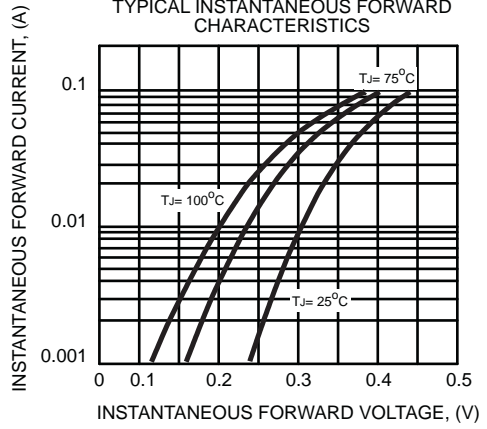


FIG. 3
TYPICAL JUNCTION CAPACITANCE

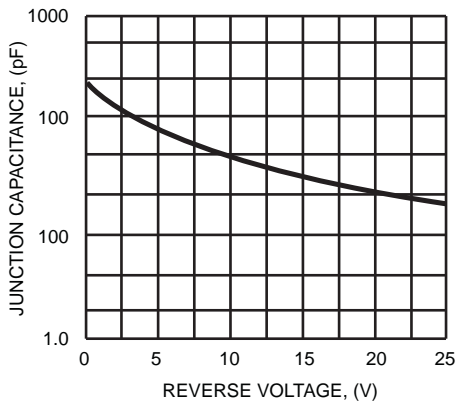
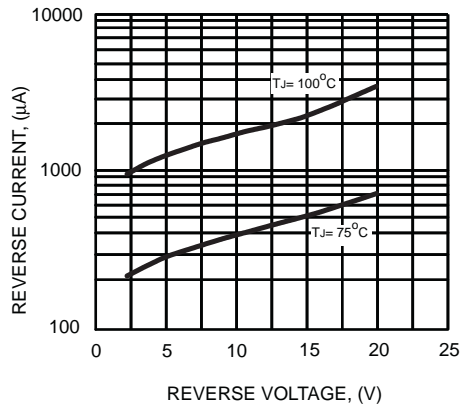


FIG. 4
TYPICAL REVERSE CHARACTERISTICS



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