

SCHOTTKY DIODES

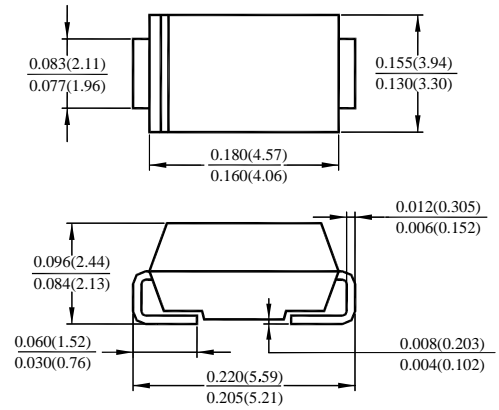
FEATURES

- Plastic package has Underwriters Laboratory
- Flammability Classification 94V-0
- For surface mounted applications
- Metal silicon junction, majority carrier conduction
- Built-in strain relief, ideal for automated placement
- Low power loss, high efficiency.
- High forward surge current capability

MECHANICAL DATA

- SMA (DO-214AA) molded plastic body
- leads solderable per MIL-STD-750, Method 2026
- color band denotes cathode end

SS12---SS110



Dimensions in inches and (millimeters)
DO-214AA (SMB)

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%.

Parameter	Symbols	SS12	SS13	SS14	SS15	SS16	SS18	SS110	Unit
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	20	30	40	50	60	80	100	V
Maximum RMS Voltage	V _{RMS}	14	21	28	35	42	56	70	V
Maximum DC Blocking Voltage	V _{DC}	20	30	40	50	60	80	100	V
Maximum Average Forward Rectified Current	I _(AV)	1							A
Peak Forward Surge Current 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC)	I _{FSM}	40							A
Maximum Instantaneous Forward Voltage at 1 A	V _F	0.55		0.75		0.85			V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I _R	0.5							mA
		6			5				
Typical Junction Capacitance ¹⁾	C _J	110			90				pF
Typical Thermal Resistance ²⁾	R _{JA}	88							°C/W
Operating Junction Temperature Range	T _J	- 65 to + 125			- 65 to + 150				°C
Storage Temperature Range	T _S	- 65 to + 150							°C

1) Measured at 1MHz and applied reverse voltage of 4 V D.C.
2) P.C.B. mounted with 0.2 X 0.2" (5 X 5 mm) copper pad areas.

SS12---SS110 Typical Characteristics

FIG.1-FORWARD CURRENT DERATING CURVE

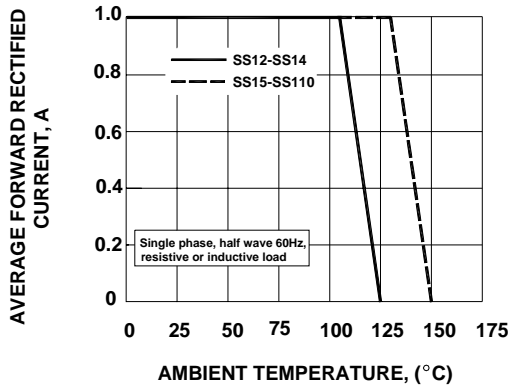


Fig.2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

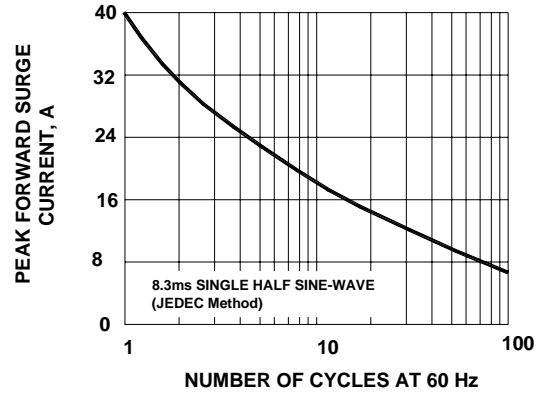


Fig.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

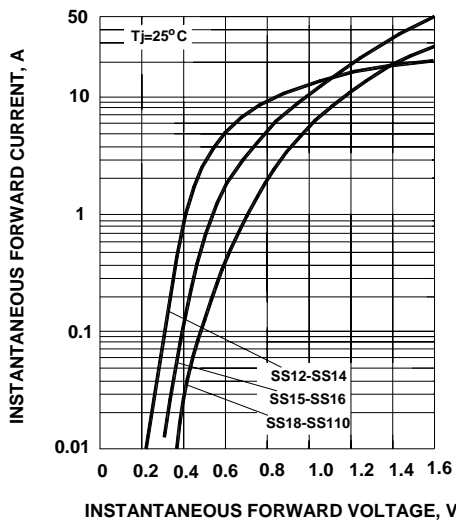


Fig.4- TYPICAL REVERSE CHARACTERISTICS

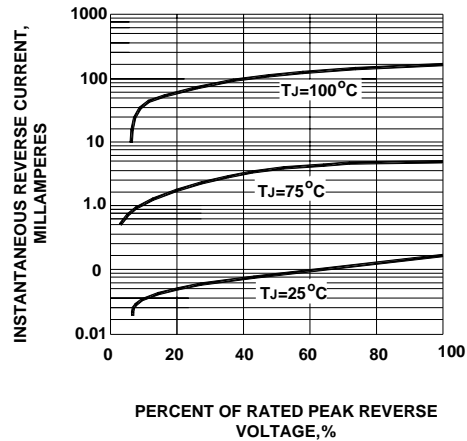


Fig.5- TYPICAL JUNCTION CAPACITANCE

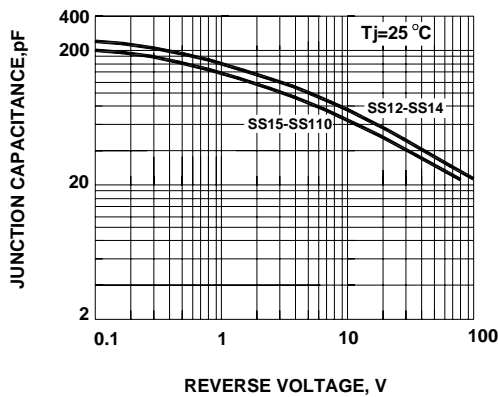


Fig.6- TYPICAL TRANSIENT THERMAL IMPEDANCE

