

SCHOTTKY DIODES

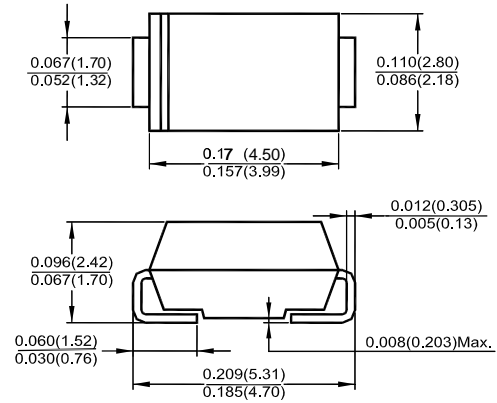
FEATURES

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

SS14---SS110



Dimensions in inches and (millimeters)  
DO-214AC (SMA)

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 <sub>RRM</sub>	20	30	40	50	60	80	100	V
Maximum RMS Voltage	V <sub>RMS</sub>	14	21	28	35	42	56	70	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	20	30	40	50	60	80	100	V
Maximum Average Forward Rectified Current	I <sub>(AV)</sub>	1							A
Peak Forward Surge Current 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC)	I <sub>FSM</sub>	40							A
Maximum Instantaneous Forward Voltage at 1 A	V <sub>F</sub>	0.50		0.70		0.80		V	
Maximum DC Reverse Current at Rated DC Blocking Voltage	I <sub>R</sub>	0.5							mA
		6			5				
Typical Junction Capacitance <sup>1)</sup>	C <sub>J</sub>	110			90			pF	
Typical Thermal Resistance <sup>2)</sup>	R <sub>JA</sub>	88							°C/W
Operating Junction Temperature Range	T <sub>J</sub>	- 65 to + 125			- 65 to + 150			°C	
Storage Temperature Range	T <sub>S</sub>	- 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.

SS14---SS110 Typical Characteristics

FIG.1-FORWARD CURRENT DERATING CURVE

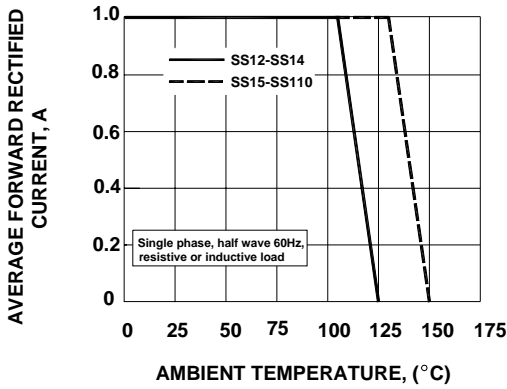


Fig.2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

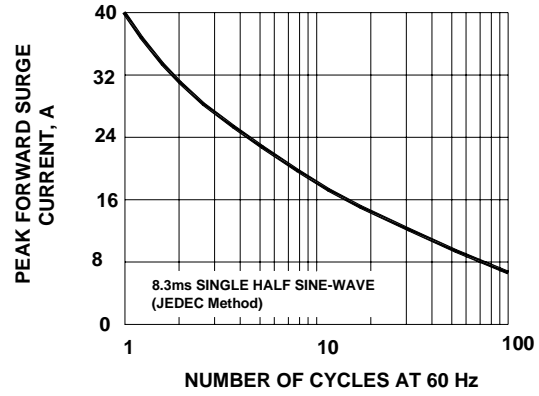


Fig.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

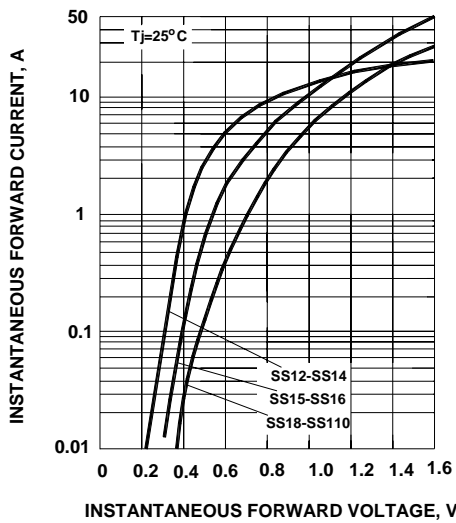


Fig.4- TYPICAL REVERSE CHARACTERISTICS

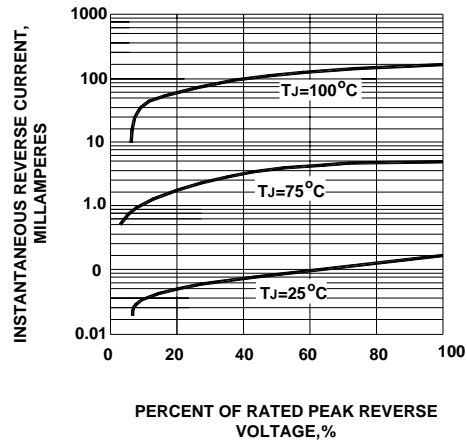


Fig.5- TYPICAL JUNCTION CAPACITANCE

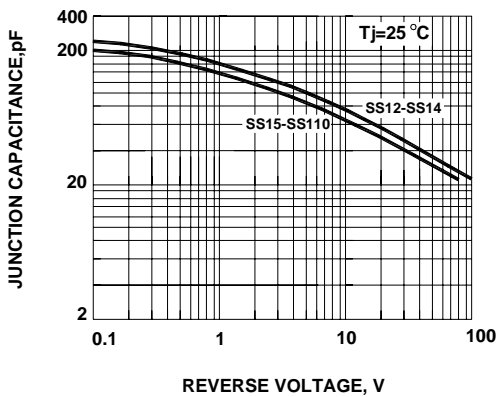


Fig.6- TYPICAL TRANSIENT THERMAL IMPEDANCE

