

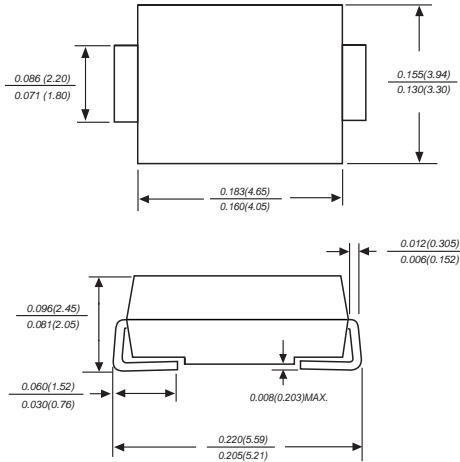
SS82 THRU SS810

SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 20 to 100 Volts Forward Current - 8.0 Amperes

SMB

DO-214AA



Dimensions in inches and (millimeters)

FEATURES

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ Construction utilizes void-free molded plastic technique
- ◆ Low reverse leakage
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed: 250°C, 0.25" (6.35mm) from case for 10 seconds

MECHANICAL DATA

Case: JEDEC DO-214AA molded plastic body
Terminals: leads solderable per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode end
Mounting Position: Any
Weight: 0.005 ounce, 0.138 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

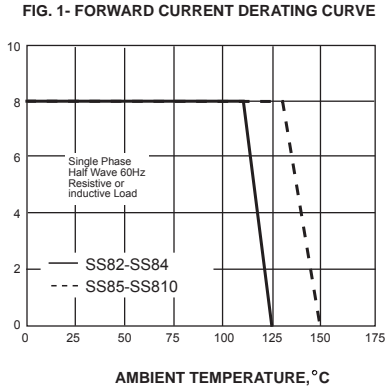
Ratings at 25°C ambient temperature unless otherwise specified.
 Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

	SYMBOLS	SS82	SS83	SS84	SS85	SS86	SS88	SS89	SS810	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	50	60	80	90	100	VOLTS
Maximum RMS voltage	V_{RMS}	14	21	28	35	42	56	63	70	VOLTS
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	80	90	100	VOLTS
Maximum average forward rectified current (see fig.1)	$I_{(AV)}$	8.0								Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	200								Amps
Maximum instantaneous forward voltage at 8.0A	V_F	0.55		0.70		0.85				Volts
Maximum DC reverse current at rated DC blocking voltage	I_R	0.5		15.0		0.1		5.0		mA
Typical junction capacitance (NOTE 1)	C_J	300								pF
Typical thermal resistance (NOTE 2)	R_{qjc}	3.0								°C/W
Operating junction temperature range	T_J	-65 to +125			-65 to +150					°C
Storage temperature range	T_{STG}	-65 to +150								°C

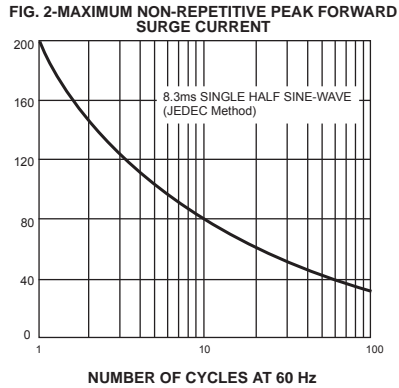
Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C. 2. P.C.B. mounted with 0.4x0.4" (10x10mm) copper pad areas



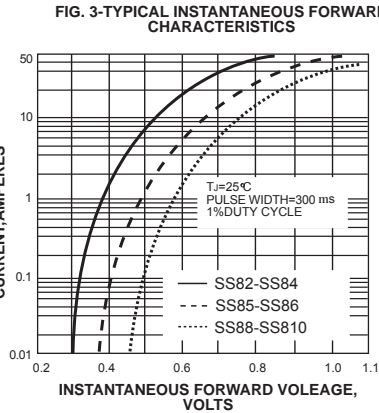
AVERAGE FORWARD RECTIFIED CURRENT,
AMPERES



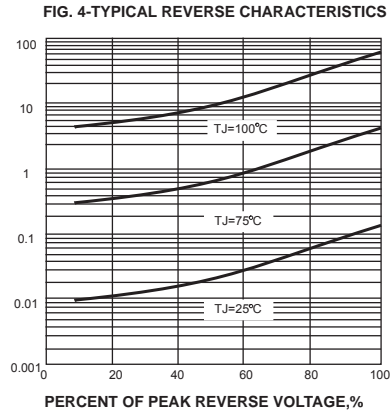
PEAK FORWARD SURGE CURRENT,
AMPERES



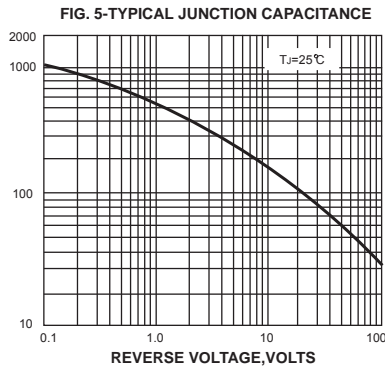
INSTANTANEOUS FORWARD CURRENT, AMPERES



INSTANTANEOUS REVERSE CURRENT,
MILLIAMPERES



JUNCTION CAPACITANCE, pF



TRANSIENT THERMAL IMPEDANCE,
°C/W

