



SCHOTTKY BARRIER RECTIFIER

SS12 THRU SS110

VOLTAGE RANGE
CURRENT

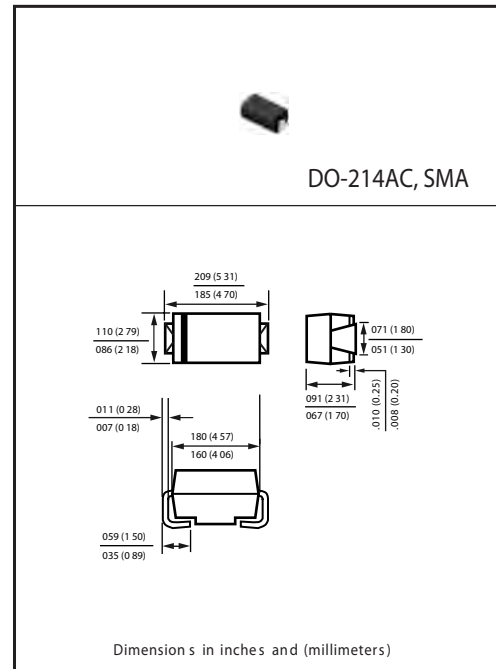
20 to 100 Volts
1.0 Ampere

FEATURES

- Low profile surface mount package
- Built in strain relief
- High switching speed
- Low voltage drop, high efficiency
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- Guardring for overvoltage protection

MECHANICAL DATA

- Case: Transfer molded plastic
- Epoxy: UL 94V-0 rate flame retardant
- Lead: Solder plated, solderable per MIL-STD-750 method 2026
- Polarity: Color band denotes cathode end
- Weight: 0.002 ounce, 0.064 gram



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%

	SYMBOLS	SS12	SS13	SS14	SS15	SS16	SS18	SS19	SS110	UNIT
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, At T_J see figure 1	$I_{(AV)}$	1.0								Amps
Peak Forward Surge Current 8.3mS single half sine wave superimposed on rated load (JEDEC method)	I_{FSM}	30								Amps
Maximum Instantaneous Forward Voltage @ 1.0A (Note 1)	V_F	0.55		0.75		.85				Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage per element	I_R	6.0				5.0				mA
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	88								°C/W
	$R_{\theta JL}$	28								
Operating Junction Temperature	T_J	(-55 TO +150)								°C
Storage Temperature Rang	T_{STG}	(-55 TO +150)								°C

Notes:

1. Pulse test: 300µS pulse width, 1% duty cycle
2. PCB mounted with 0.2" x 0.2" (5.0cm x 5.0cm) copper pads



RATINGS AND CHARACTERISTIC CURVES SS12 THRU SS110

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

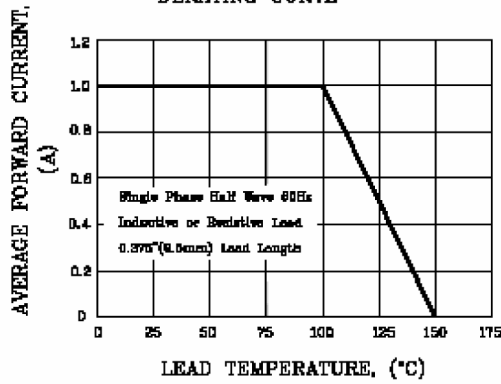


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

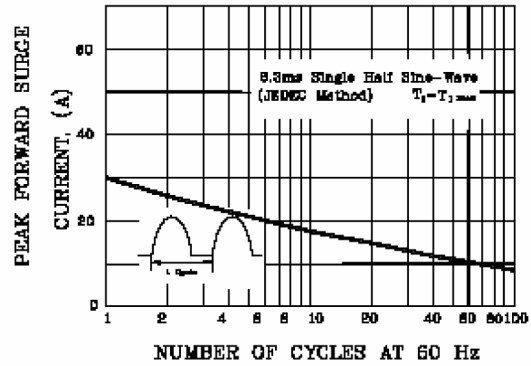


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

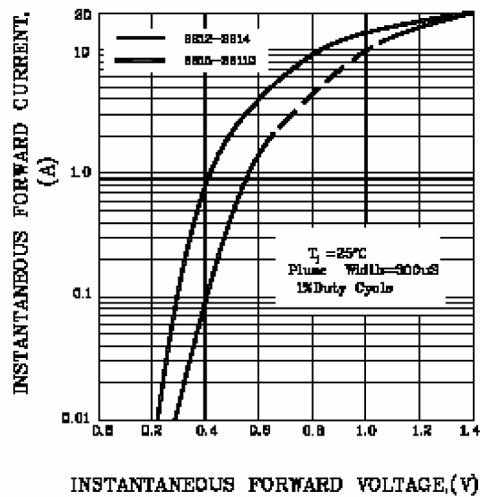


FIG.4-TYPICAL REVERSE CHARACTERISTICS

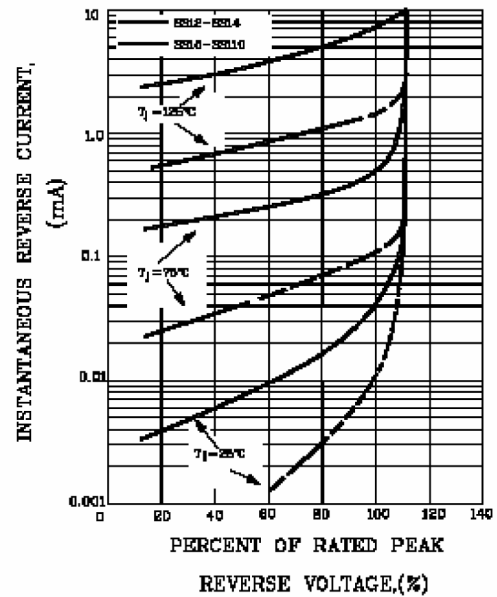


FIG.5-TYPICAL JUNCTION CAPACITANCE

