

SS12 THRU SS110

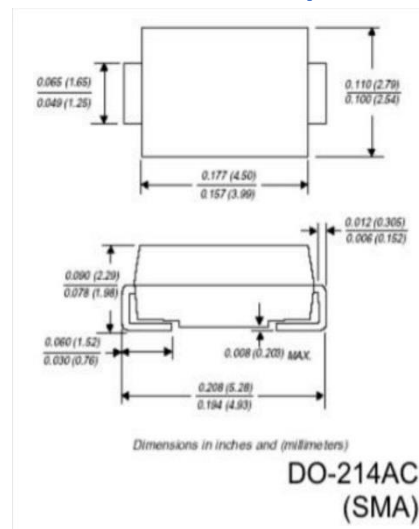
FEATURES

- 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
- Guarding 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 208C
- Polarity: Color band denotes cathode end
- Weight: 0.002 Ounce, 0.064 gram

Voltage Range 20 to 100 V
Current 1.0 Ampere



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load

For capacitive load derate current by 20%

Parameter [Conditions]	Symbol	SS 12	SS 13	SS 14	SS 15	SS 16	SS 18	SS 19	SS 110	Unit
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	20	30	40	50	60	80	90	100	V
Maximum RMS Voltage	V _{RMS}	14	21	28	35	42	56	63	70	V
Maximum DC Blocking Voltage	V _{DC}	20	30	40	50	60	80	90	100	V
Maximum Average Forward Rectified Current, At TL see figure 1	I _(AV)	1.0								A
Peak Forward Surge Current 8.3ms single half sine wave superimposed on rated load (JEDEC method)	I _{FSM}	30								A
Maximum Instantaneous Forward Voltage @ 1.0A (Note 1)	V _F	0.55			0.75		0.85			V
Maximum DC Reverse Current at Rated T _A =25°C DC Blocking Voltage per element T _A =100°C	I _R	0.5								mA
		6.0			5.0					
Typical Thermal Resistance (Note 2)	R _{θJA}	88								°C/W
	R _{θJL}	28								
Operating Junction Temperature	T _J	-55 to +150								°C
Sotrage Temperature Range	T _{STG}	-55 to +150								°C

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

TYPICAL CHARACTERISTICS CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

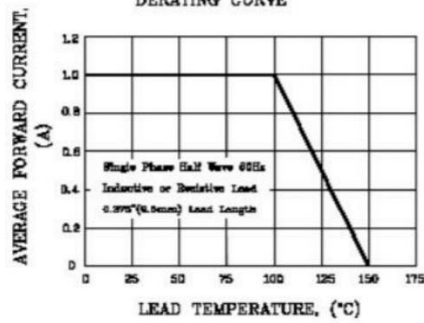


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

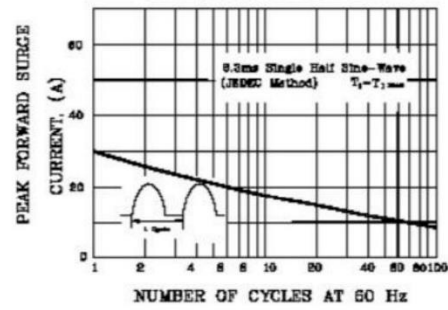


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

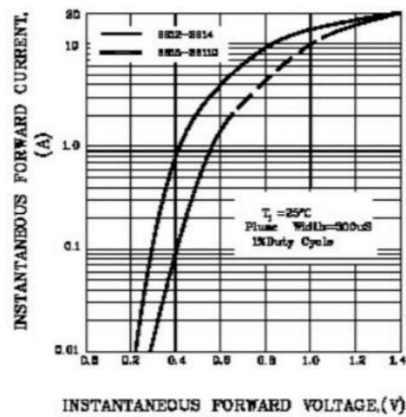


FIG.4-TYPICAL REVERSE CHARACTERISTICS

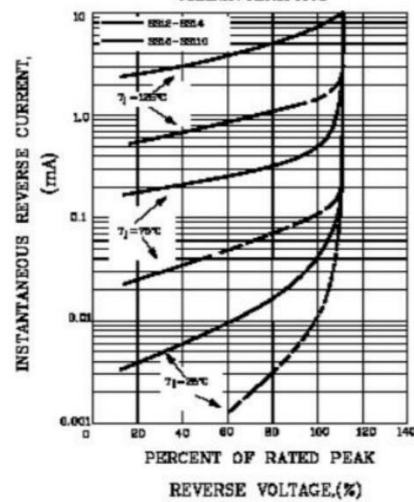


FIG.5-TYPICAL JUNCTION CAPACITANCE

