



Kernelbas semiconductor

SS12 THRU SS110
20V-100V 1.0A

FEATURES

- Schottky barrier rectifier
- Guardring protection
- Low forward voltage
- Reverse energy tested
- High current capability
- Extremely low thermal resistance

Mechanical Data

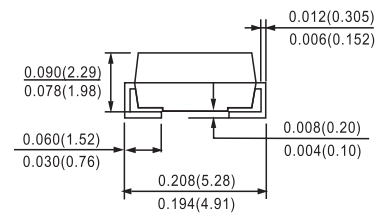
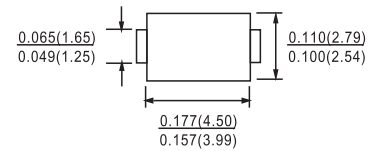
Case: SMA molded plastic body

Polarity: Color band denotes cathode end

Mounting position: ANY

Weight: 0.002 ounces, 0.064 gram

DO-214AC(SMA)



Dimensions in inches and (millimeters)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 ambient temperature unless otherwise specified

Device marking code		SS12	SS13	SS14	SS15	SS16	SS18	SS19	SS110	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	50	60	80	90	100	V
Maximum RMS voltage	V_{RWS}	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 $T_L=90^{\circ}C$	$I_{F(AV)}$	1.0								A
Peak forward surge current 8.3ms single half-sine-wave	I_{FSM}	40								A
Maximum instantaneous forward voltage at $I_{FM}=1.0A$ (NOTE1)	V_F	0.50			0.75		0.85			V
Maximum DC reverse current $T_J=25^{\circ}C$ at rated DC blocking voltage $T_J=125^{\circ}C$	I_R	0.2				0.5				m A
		6.0				5.0				
Maximum thermal resistance	$R_{\theta JL}$	28								$^{\circ}C/W$
Operating temperature range	T_J	-55 ---- +125								$^{\circ}C$
Storage temperature range	T_{STG}	-55 ---- +150								$^{\circ}C$

NOTE: 1.Pulse test: Pulse width 300us,duty cycle 1 %



RATINGS AND CHARACTERISTIC CURVES SS12 THRU SS110

FIG.1 – FORWARD DERATING CURVE

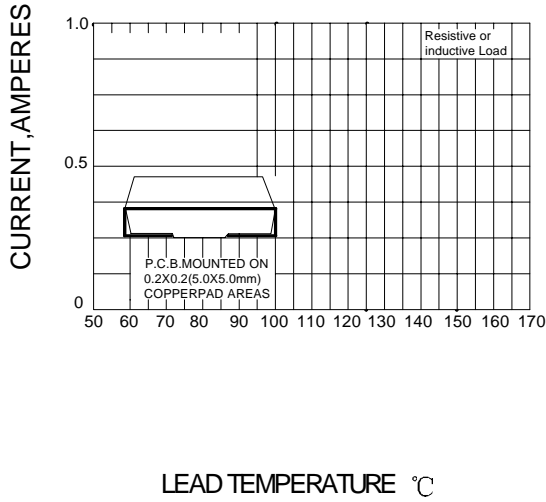


FIG.2– PEAK FORWARD SURGE CURRENT

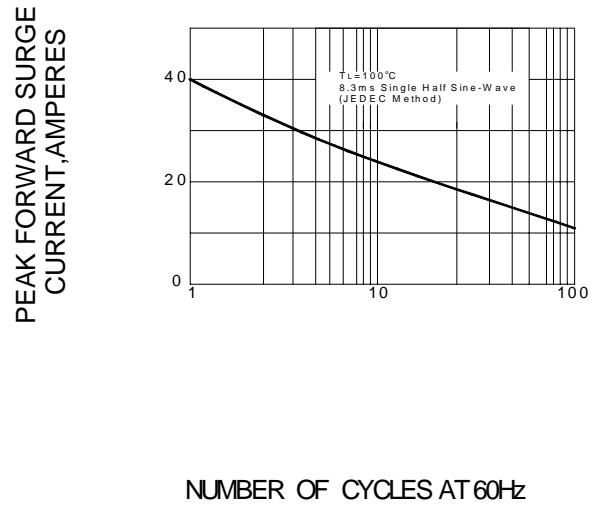


FIG.3 – TYPICAL FORWARD CHARACTERISTICS

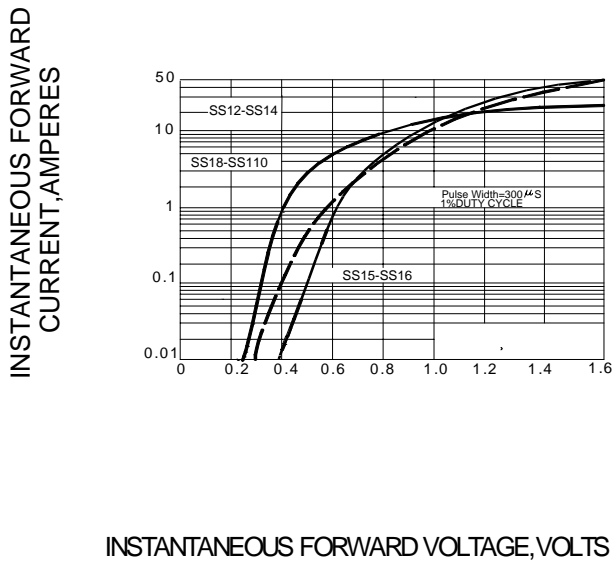
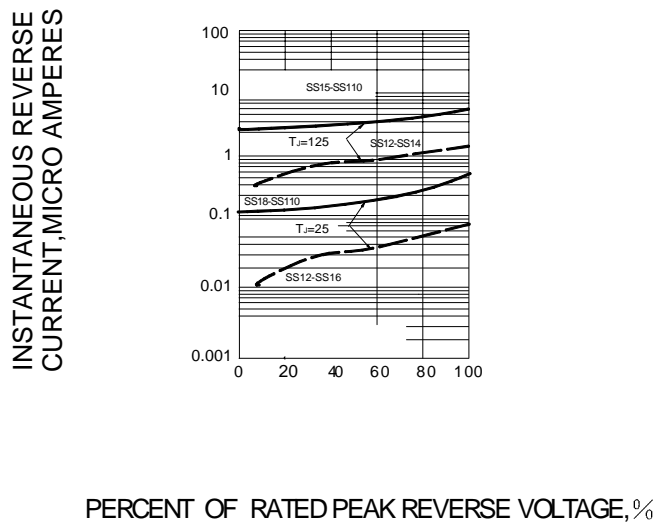


FIG.4 – TYPICAL REVERSE CHARACTERISTICS





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