HAOLIN ELECTRONICS

Surface Mount Schottky Barrier Rectifiers

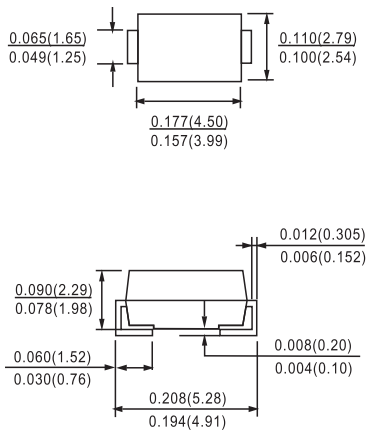
SS12 THRU SS110(5819)

20V-100V 1.0A

FEATURES

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

DO-214AC(SMA)



Dimensions in inches and (millimeters)

Mechanical Data

Case: SMA molded plastic body

Polarity: Color band denotes cathode end

Mounting position: ANY

Weight: 0.002 ounces, 0.064 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

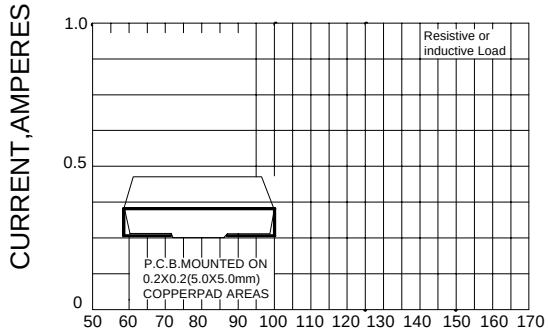
Ratings at 25°C ambient temperature unless otherwise specified

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	$I_{F(AV)}$	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 at rated DC blocking voltage T_J=125	I_R	0.2 6.0					0.5 5.0			m A
Maximum thermal resistance	$R_{\theta JL}$	28								°C/W
Operating temperature range	T_J	-55 ---- +125								°C
Storage temperature range	T_{STG}	-55 ---- +150								°C

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

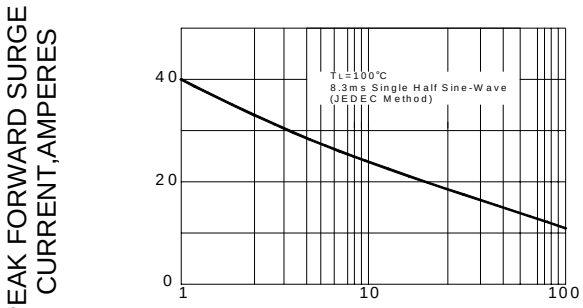
RATINGS AND CHARACTERISTIC CURVES SS12 THRU SS110

FIG.1 – FORWARD DERATING CURVE



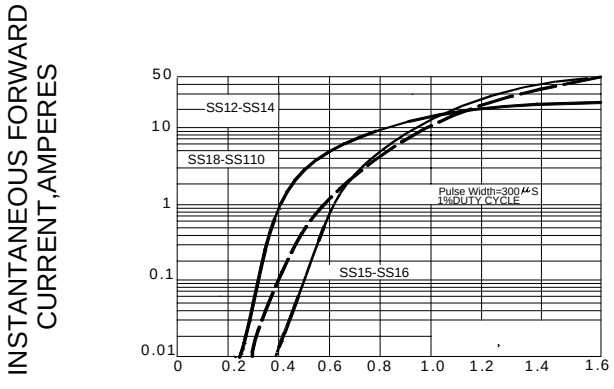
LEAD TEMPERATURE ℃

FIG.2– PEAK FORWARD SURGE CURRENT



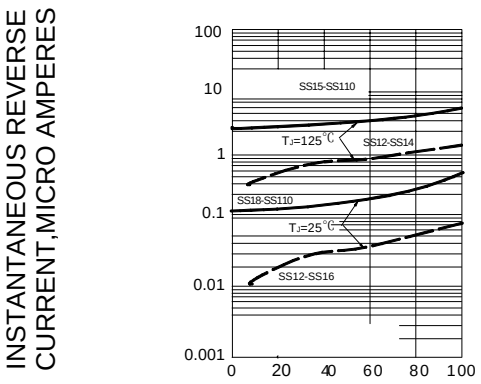
NUMBER OF CYCLES AT 60Hz

FIG.3 – TYPICAL FORWARD CHARACTERISTICS



INSTANTANEOUS FORWARD VOLTAGE,VOLTS

FIG.4 – TYPICAL REVERSE CHARACTERISTICS



PERCENT OF RATED PEAK REVERSE VOLTAGE,%