

FEATURES

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

Mechanical Data

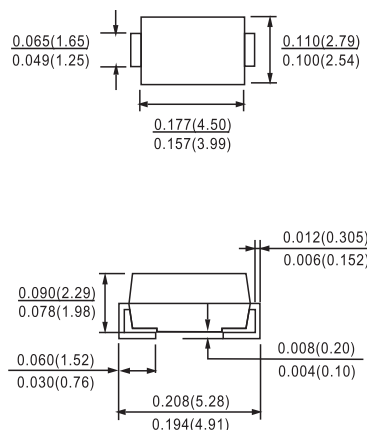
Case: SMA molded plastic body

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°C ambient temperature unless otherwise specified.

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

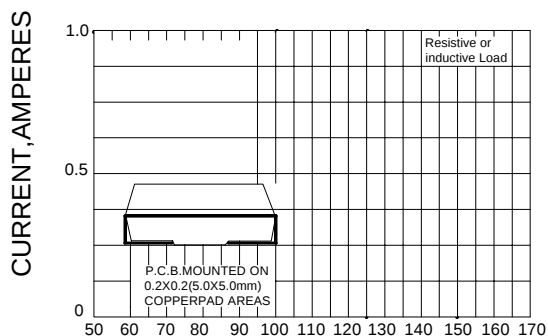
	SYMBOLS	SK12	SK13	SK14	SK15	SK16	SK18	SK110	UNITS
Maximum repetitive peak reverse voltage	V _{RRM}	20	30	40	50	60	80	100	VOLTS
Maximum RMS voltage	V _{RMS}	14	21	28	35	42	56	70	VOLTS
Maximum DC blocking voltage	V _{DC}	20	30	40	50	60	80	100	VOLTS
Maximum average forward rectified current at T _L (see fig.1)	I _(AV)	1.0							Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	40.0							Amps
Maximum instantaneous forward voltage at 1.0A	V _F	0.45	0.55		0.70		0.85		Volts
Maximum DC reverse current T _A =25°C at rated DC blocking voltage T _A =100°C	I _R	0.5							mA
		6.0			5.0				
Typical junction capacitance (NOTE 1)	C _J	110			90				pF
Typical thermal resistance (NOTE 2)	R _{qJA}	88.0							°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 0.2x0.2"(5.0x5.0mm) copper pad areas

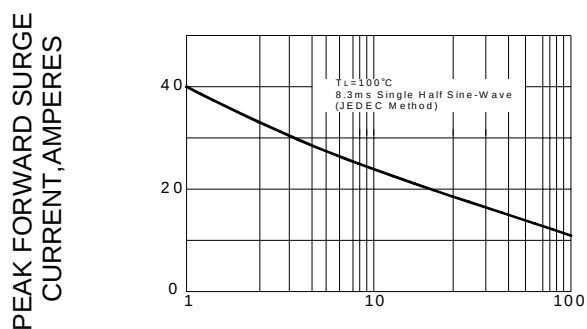
RATINGS AND CHARACTERISTIC CURVES SK12 THRU SK110

FIG.1 – FORWARD DERATING CURVE



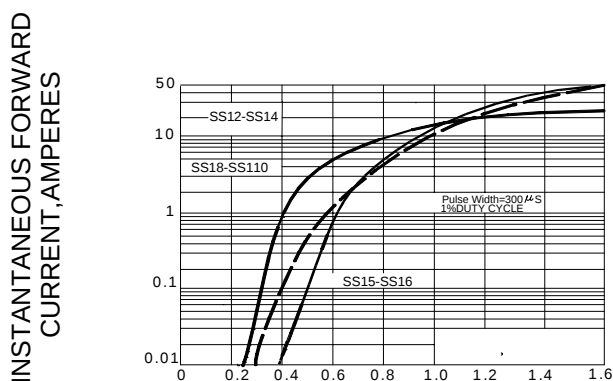
LEAD TEMPERATURE °C

FIG.2– PEAK FORWARD SURGE CURRENT



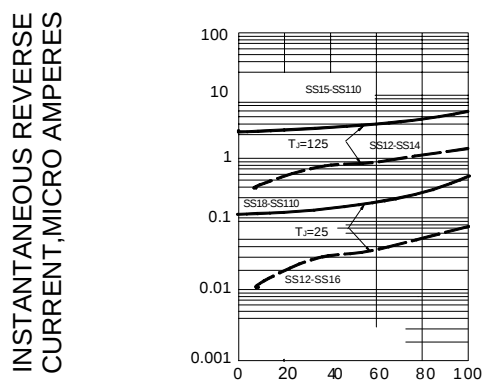
NUMBER OF CYCLES AT 60Hz

FIG.3 – TYPICAL FORWARD CHARACTERISTICS



INSTANTANEOUS FORWARD VOLTAGE, VOLTS

FIG.4 – TYPICAL REVERSE CHARACTERISTICS



PERCENT OF RATED PEAK REVERSE VOLTAGE, %