

SK12 THRU SK110

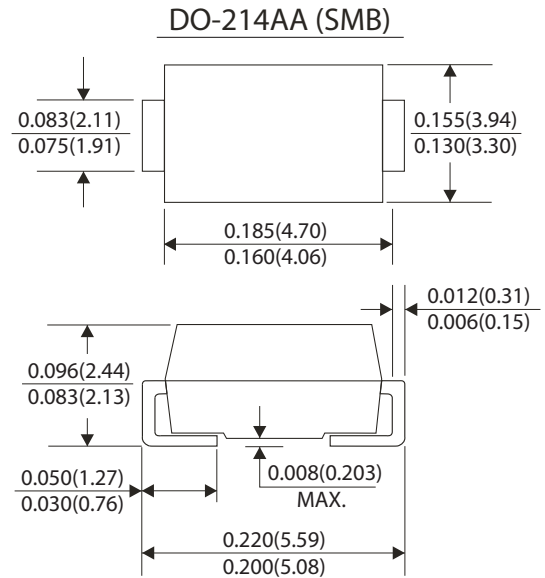
CURRENT 1.0Ampere
VOLTAGE 20 to 100 Volts

Features

- Plastic Package has Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction, majority carrier conduction
- For surface mount applications
- Guard ring for overvoltage protection
- Low power loss, high efficiency
- High current capability, Low forward voltage drop
- High surge capability
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications
- High temperature soldering guaranteed : 250°C/10 seconds at terminals

Mechanical Data

- Case : JEDEC SMB(DO-214AA) molded plastic body
- Terminals : Solder Plate, solderable per MIL-STD-750, Method 2026
- Polarity : Color band denotes cathode end
- Weight : 0.003 ounce, 0.093 gram



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

(Ratings at 25°C ambient temperature unless otherwise specified, single phase, half wave, resistive or inductive load. For capacitive load, derate by 20%)

	Symbols	SK12	SK13	SK14	SK15	SK16	SK18	SK19	SK110	Units
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 0.375" (9.5mm) lead length (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}	25.0								Amps
Maximum instantaneous forward voltage at 1.0A (Note 1)	V_F	0.55			0.70		0.85			Volts
Maximum instantaneous reverse current at rated DC blocking voltage (Note1)	$T_A=25^\circ\text{C}$	1.0								mA
	$T_A=100^\circ\text{C}$	10								
Typical thermal resistance (Note 2)	$R_{\theta JA}$	50								°C/W
Operating junction temperature range	T_J	-50 to +125								°C
Storage temperature range	T_{STG}	-65 to +150								°C

Notes:

- (1) Pulse test: 300µS pulse width, 1% duty cycle
- (2) Thermal resistance junction to ambient



RATINGS AND CHARACTERISTIC CURVES SK12 THRU SK110

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

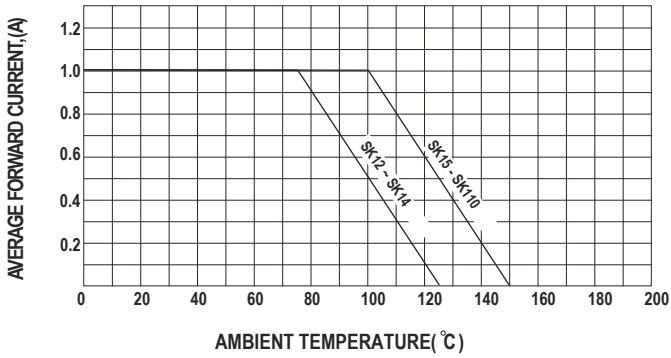


FIG.2-TYPICAL FORWARD CHARACTERISTICS

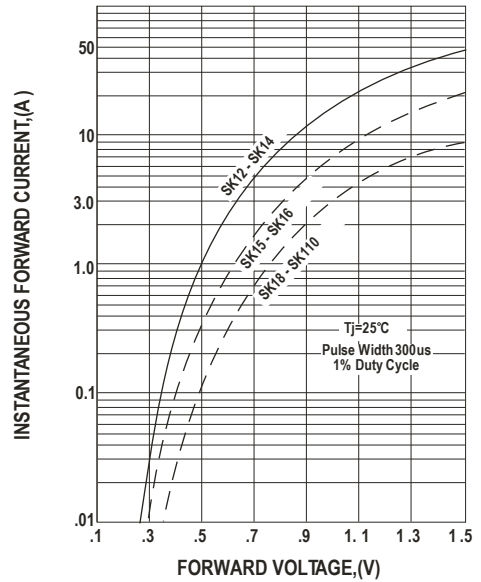


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

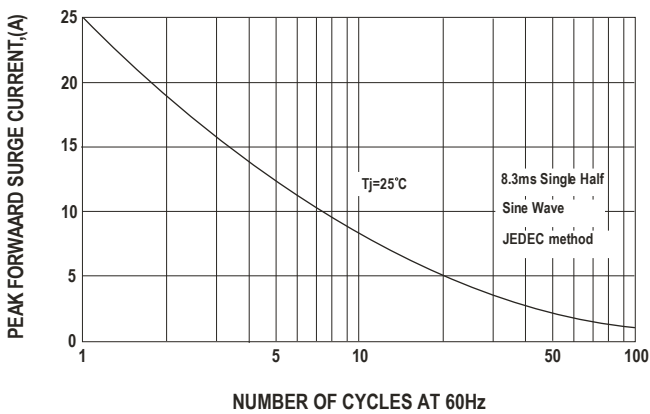


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

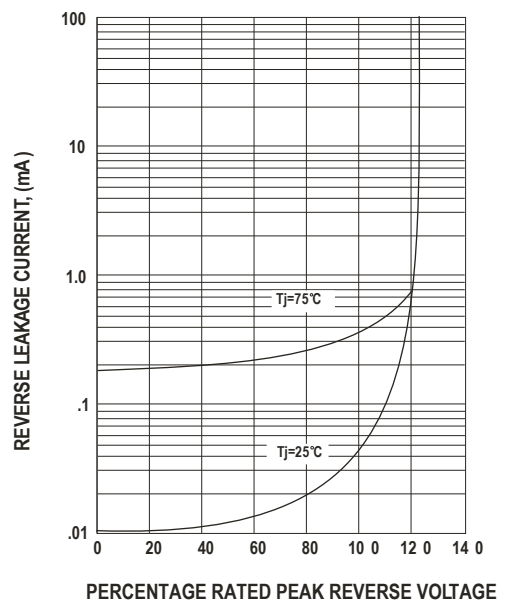


FIG.4-TYPICAL JUNCTION CAPACITANCE

