

SK12 thru SK16

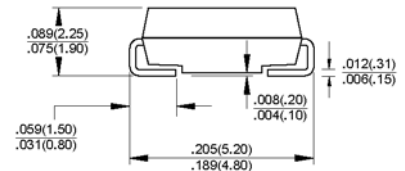
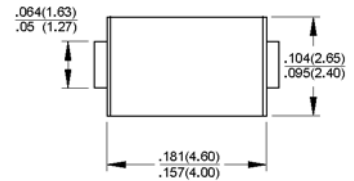
Surface Mount Schottky Barrier Rectifiers
Reverse Voltage 20 to 60 Volts Forward Current 1.0 Ampere

Features

- ◆ For surface mounted applications
- ◆ Metal-Semiconductor junction with guarding
- ◆ Epitaxial construction
- ◆ Very low forward voltage drop
- ◆ High current capability
- ◆ Plastic material has UL flammability classification 94V-0
- ◆ For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications



DO-214AC (SMA)



Dimensions in inches and (millimeters)

Mechanical Data

- ◆ Case : JEDEC DO-214AC(SMA) molded plastic
- ◆ Polarity : Indicated by cathode band
- ◆ Weight : 0.002 ounce, 0.064 gram

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, derate current by 20%

Parameter	Symbols	SK12	SK13	SK14	SK15	SK16	Units
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	50	60	Volts
Maximum RMS voltage	V_{RMS}	14	21	28	35	42	Volts
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	Volts
Maximum average forward rectified current @ $T_L=100^\circ\text{C}$	I_{AV}	1.0					Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30.0					Amps
Maximum forward voltage at 1.0A DC	V_F	0.50			0.70		Volts
Maximum DC reverse current @ $T_J=25^\circ\text{C}$ at rated DC blocking voltage @ $T_J=100^\circ\text{C}$	I_R				0.5 10.0		mA
Typical junction capacitance (Note 1)	C_J				110		pF
Typical thermal resistance (Note 2)	$R_{\theta JL}$				20		$^\circ\text{C/W}$
Operating junction temperature range	T_J				-55 to +125		$^\circ\text{C}$
Storage temperature range	T_{STG}				-55 to +150		$^\circ\text{C}$

- Notes: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
2. Thermal Resistance Junction to Lead.

RATINGS AND CHARACTERISTIC CURVES

