



SK22-S thru SK2B-S

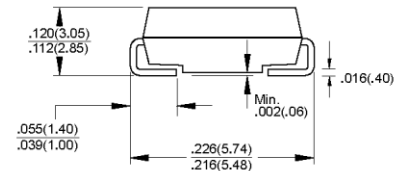
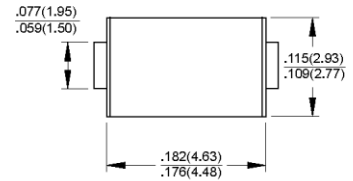
2.0 Amps. Surface Mount Schottky Barrier Rectifiers
Voltage Range 20 to 100 Volts Forward Current 2.0 Amperes

Features

- ◆ Ideal for surface mounted application
- ◆ Metallurgically bonded construction
- ◆ Low forward voltage drop
- ◆ Easy pick and place
- ◆ High surge current capability
- ◆ Plastic material used carries Underwriters Laboratory Classification 94V-O
- ◆ Epitaxial construction
- ◆ Low leakage current
- ◆ High temperature soldering:
260°C / 10 seconds at terminals



DO-214AC (SMAJ)



Dimensions in inches and (millimeters)

Mechanical Data

- ◆ Cases: New SMA molded plastic
- ◆ Terminals: Solder plated
- ◆ Polarity: Indicated by cathode band
- ◆ Weight: 0.004 ounce, 0.11 gram

Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%

Parameter	Symbols	SK 22-S	SK 23-S	SK 24-S	SK 25-S	SK 26-S	SK 27-S	SK 28-S	SK 29-S	SK 2B-S	Units
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	50	60	70	80	90	100	Volts
Maximum RMS voltage	V_{RMS}	14	21	28	35	42	49	56	63	70	Volts
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	70	80	90	100	Volts
Maximum average forward rectified current at derating lead temperature	$I_{F(AV)}$	2.0									Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	50.0									Amps
Maximum instantaneous forward voltage at 1.0A DC	V_F	0.550			0.700			0.850			Volts
Maximum DC reverse current @ $T_A=25^\circ\text{C}$ at rated DC blocking voltage @ $T_A=100^\circ\text{C}$	I_R				0.5 20						mA
Typical thermal resistance (Note 1)	$R_{\theta JA}$				40						$^\circ\text{C/W}$
Typical junction capacitance (Note 2)	C_J				130						pF
Operating temperature range	T_J	-65 to +125			-65 to +150						$^\circ\text{C}$
Storage temperature range	T_{STG}				-65 to +150						$^\circ\text{C}$

- Notes:**
1. Thermal Resistance (Junction to Ambient).
 2. Measured at 1 MHz and applied reverse voltage of 4.0 volts.
 3. P.C.B Mounted with 0.2X0.2" (5.0 X 5.0mm²) copper pad area.

RATINGS AND CHARACTERISTIC CURVES

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

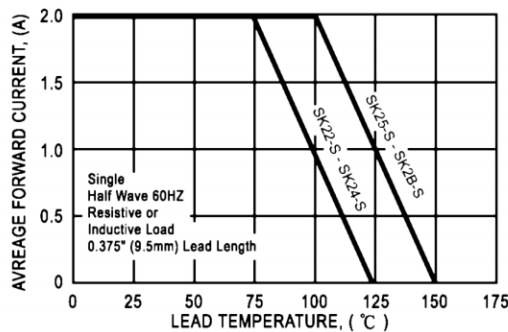


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

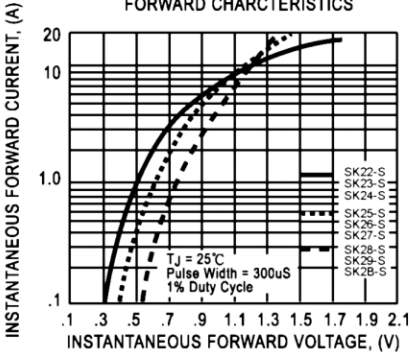


FIG. 3A - TYPICAL REVERSE CHARACTERISTICS

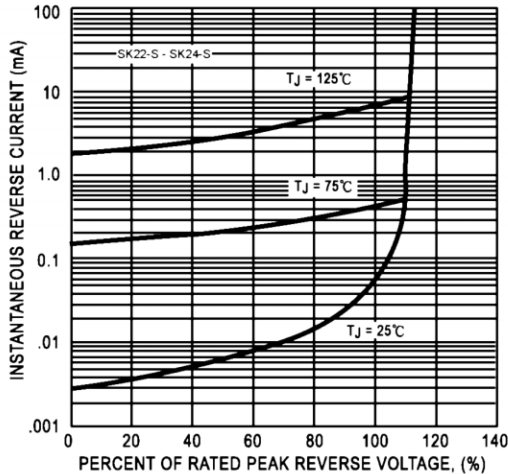


FIG. 3B - TYPICAL REVERSE CHARACTERISTICS

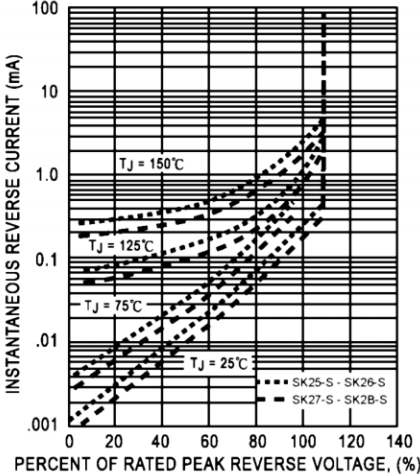


FIG. 4 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

