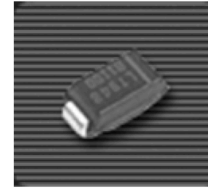
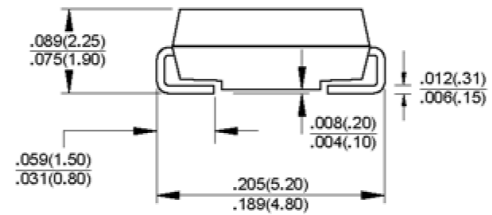
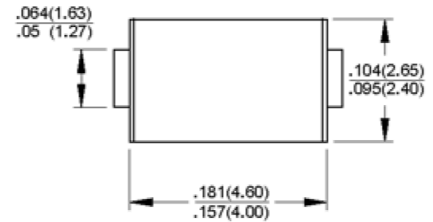


Features

- ◆ 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	SK17	SK18	SK19	SK1B	Units
Maximum repetitive peak reverse voltage	V_{RRM}	70	80	90	100	Volts
Maximum RMS voltage	V_{RMS}	49	56	63	70	Volts
Maximum DC blocking voltage	V_{DC}	70	80	90	100	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 @ $T_j=25^\circ\text{C}$ @ $T_j=100^\circ\text{C}$	V_F	0.79 0.69				Volts
Maximum DC reverse current at rated DC blocking voltage @ $T_j=25^\circ\text{C}$ @ $T_j=100^\circ\text{C}$	I_R	0.5 5.0				mA
Typical junction capacitance (Note 1)	C_j	30				pF
Typical thermal resistance (Note 2)	$R_{\theta ML}$	25				$^\circ\text{C/W}$
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.

FIG.1 - FORWARD CURRENT DERATING CURVE

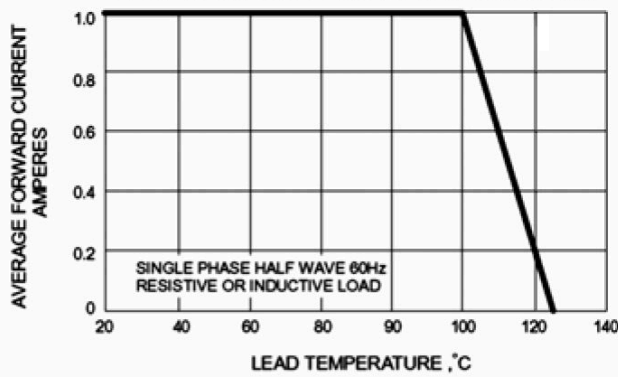


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

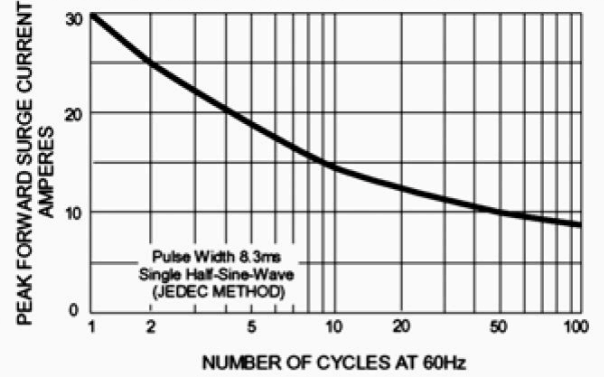


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

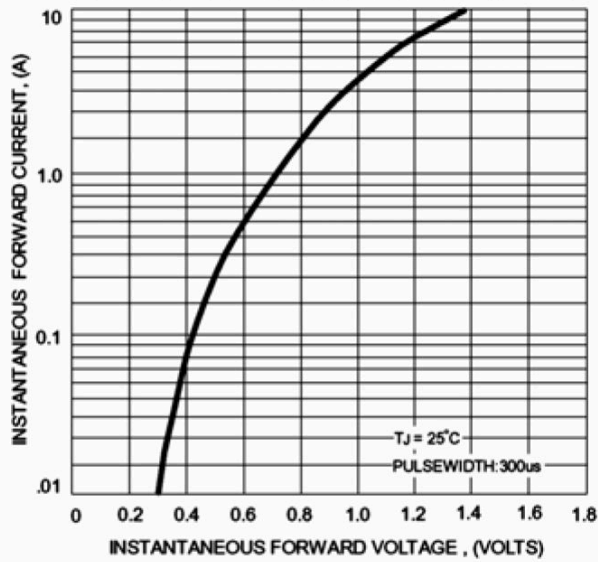


FIG.4 - TYPICAL JUNCTION CAPACITANCE

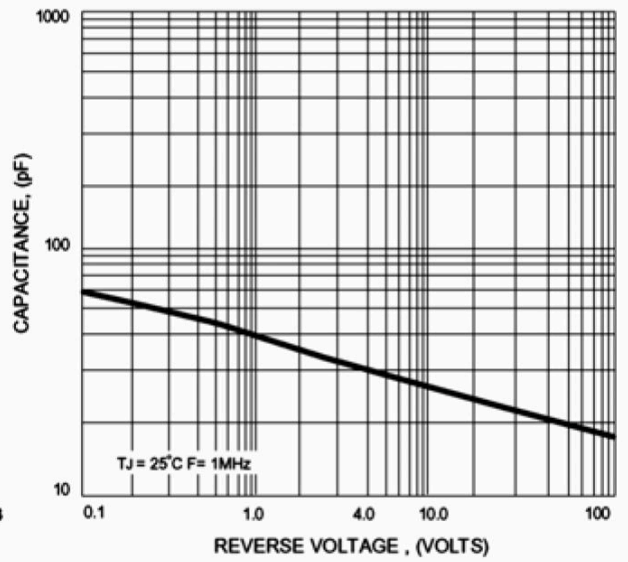


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

