COMON SEMICONDUCTOR

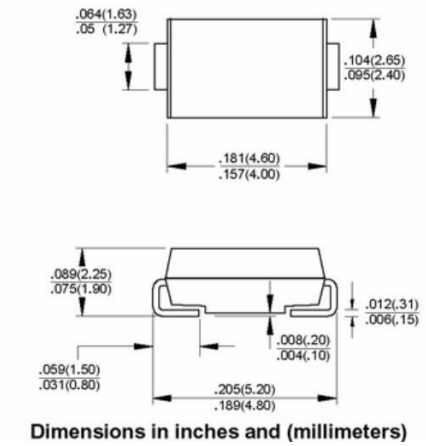
SK32A thru SK36A

Surface Mount Schottky Barrier Rectifiers
Reverse Voltage 20 to 60 Volts Forward Current 3.0 Amperes

Features

- For surface mounted applications
- Metal-Semiconductor junction with guardring
- 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 : Color band denotes cathode
- 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	SK32A	SK33A	SK34A	SK35A	SK36A	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°C	$I_{(AV)}$	3.0					Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	100.0					Amps
Maximum forward voltage at 3.0A DC	V_F	0.50			0.70		Volts
Maximum DC reverse current @T_J= 25°C at rated DC blocking voltage @T_J=100°C	I_R	0.5 20					mA
Typical junction capacitance (Note 1)	C_J	250					pF
Typical thermal resistance (Note 2) (Note 3)	$R_{\theta JL}$ $R_{\theta JA}$	10 50					°C/W
Operating junction temperature range	T_J	-55 to +125					°C
Storage temperature range	T_{STG}	-55 to +150					°C

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

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FIG.1 - FORWARD CURRENT DERATING CURVE

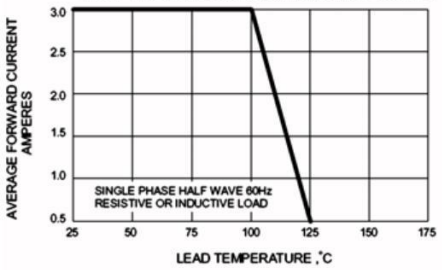

FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

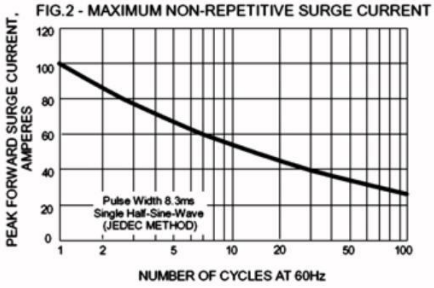

FIG.3 - TYPICAL FORWARD CHARACTERISTICS

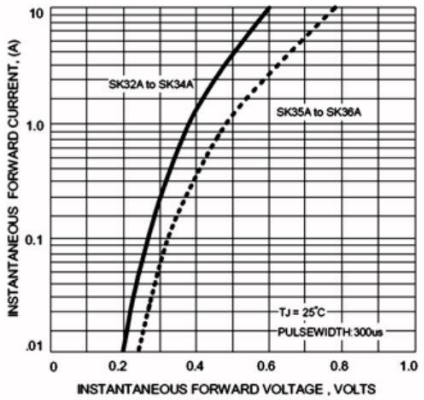

FIG.4 - TYPICAL JUNCTION CAPACITANCE

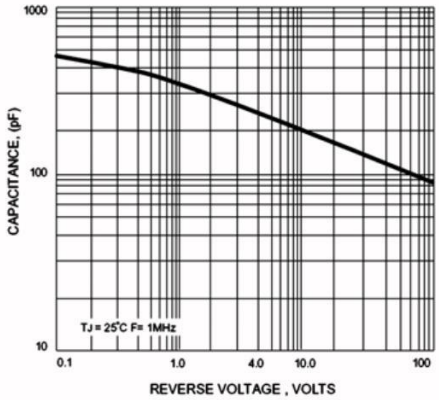

FIG.5 - TYPICAL REVERSE CHARACTERISTICS