Schottky Barrier Rectifiers

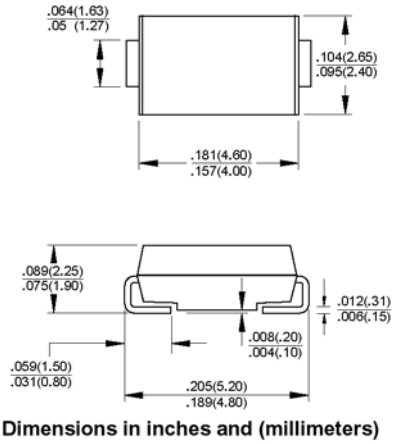
PRODUCT SUMMARY

Surface Mount
Reverse Voltage 20 to 60 Volts
Forward Current 2.0 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)

MECANICAL DATA

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

Pb-free; RoHS-compliant

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	SK22A	SK23A	SK24A	SK25A	SK26A	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	$I_{(AV)}$	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 forward voltage at 2.0A 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 (Note1)	C_J	200					pF
Typical thermal resistance (Note 2)	$R_{\theta JL}$	15					°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.

RATINGS AND CHARACTERISTIC CURVES

FIG.1 - FORWARD CURRENT DERATING CURVE

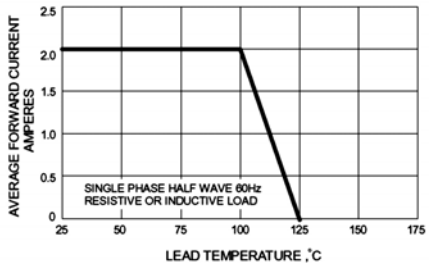


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

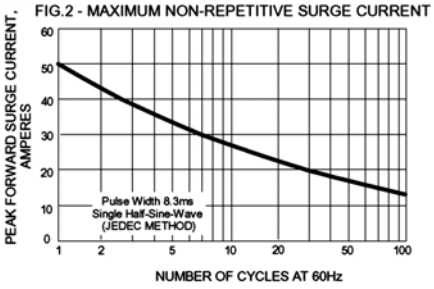


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

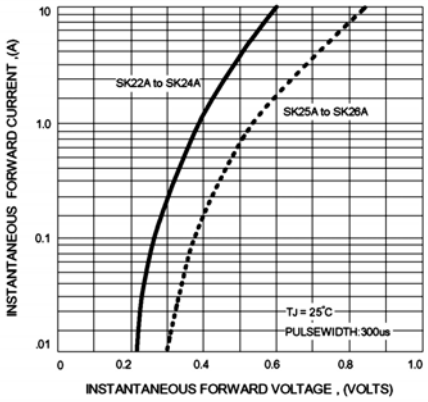


FIG.4 - TYPICAL JUNCTION CAPACITANCE

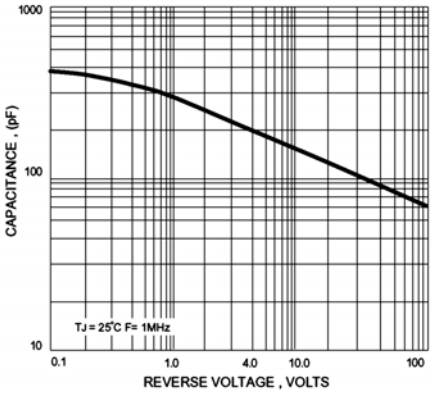


FIG.5 - TYPICAL REVERSE CHARACTERISTICS