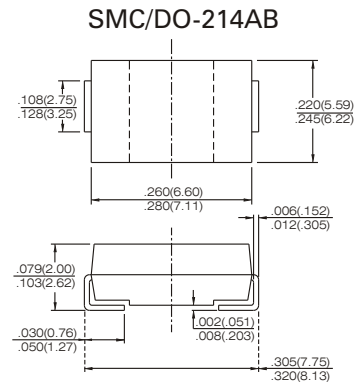


SK52C thru SK510C

www.DataSheet4U.com

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE - 20 TO 100 VOLTS CURRENT - 5.0 AMPERES



Dimensions in inches and (millimeters)

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- For surface mount applications
- Low profile package
- Built-in strain relief
- Metal to silicon rectifier, majority carrier conduction
- Low power loss, high efficiency
- High surge capability
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- High temperature soldering guaranteed 260°C/10 seconds at terminals
- High temperature soldering : 260°C/10 seconds at terminals
- Pb free product at available : 99% Sn above meet Rohs environment substance directive request

MECHANICAL DATA

Case : JEDEC DO-214AB molded plastic
 Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
 Polarity : Color band denotes positive end (cathode)
 Standard Package : 16mm tape (EIA STD EIA-481)
 Weight : 0.007 ounce, 0.21gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified
 Resistive or inductive load

	SYMBOL	SK52C	SK53C	SK54C	SK55C	SK56C	SK58C	SK59C	SK510C	UNITS
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	80	90	100	Volts
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	56	63	70	Volts
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	80	90	100	Volts
Maximum Average Forward Rectified Current at T_L (See Figure 1)	$I_{(AV)}$	5.0								Amps
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	100								Amps
Maximum Instantaneous Forward Voltage at 5.0A (Note 1)	V_F	0.5		0.75		0.85			Volts	
Maximum DC Reverse Current (NOTE 1) $T_A=25^{\circ}C$ at Rated DC Blocking Voltage $T_A=100^{\circ}C$	I_R	0.5				20			mA	
Maximum Thermal Resistance (NOTE 2)	$R_{\theta JL}$ $R_{\theta JA}$	17				55				$^{\circ}C / W$
Operating at Storage Temperature Range T_J	T_J	-50 to +150								$^{\circ}C$
Storage Temperature Range	T_{STG}	-55 to +150								$^{\circ}C$

NOTES :

1. Pulse test with $p_w=300 \mu S$, 2% duty cycle
2. Mounted on P.C.B with $14mm^2$ (0.13mm thick) copper pad areas

SK52C thru SK510C

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

RATINGS AND CHARACTERISTIC CURVES S52C THRU SK510C

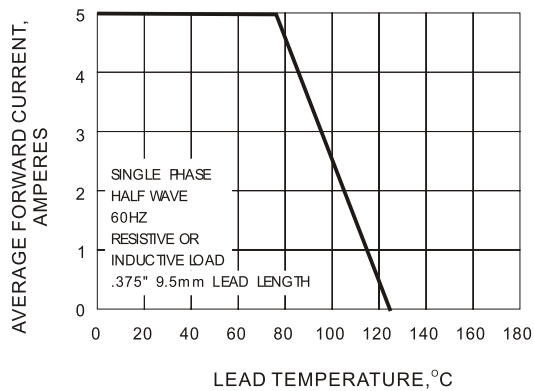


Fig. 1 - FORWARD CURRENT DERATING CURVE

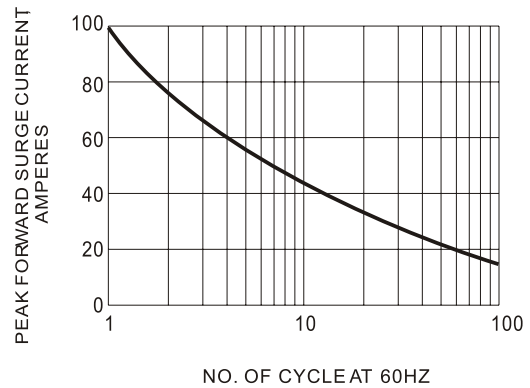


Fig. 2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

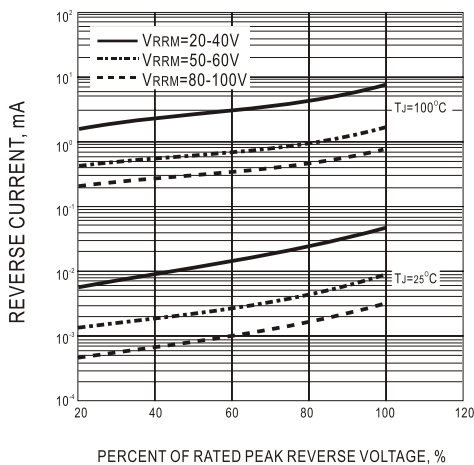


Fig. 3 - TYPICAL REVERSE CHARACTERISTICS

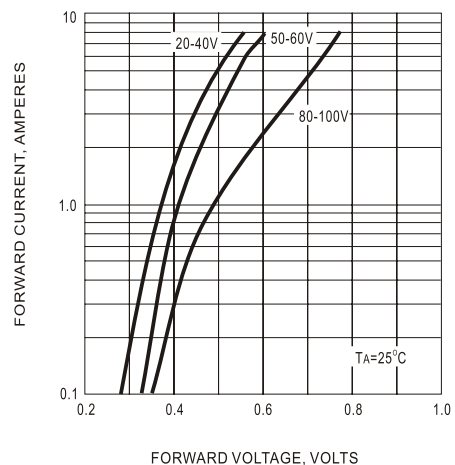


Fig. 4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS