



SK510AH

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

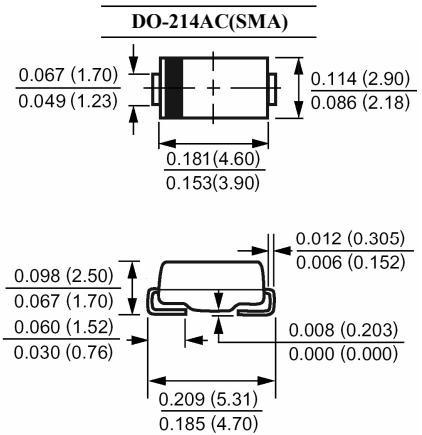
REVERSE VOLTAGE: 100 VOLTS
FORWARD CURRENT: 5.0 AMPERE

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- For surface mounted applications
- Low profile package
- Low power loss, high efficiency
- High current capacity
- Suffix " H " indicated Halogen-free part, ex.SK510AH

MECHANICAL DATA

Case : Molded plastic, DO-214AC(SMA)
 Terminals : Solder plated, solderable per MIL-STD-750, method 2026 guaranteed
 Polarity : Color band denotes cathode end
 Packaging: 12mm tape per EIA STD RS-481



Dimensions in inchs and (millimeters)

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	SK510AH	Units
		SK510	
Marking Code		SK510	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	100	Volts
Maximum RMS Voltage	V_{RMS}	70	Volts
Maximum DC Blocking Voltage	V_{DC}	100	Volts
Maximum Average Forward Rectified Current at T_L (See Fig. 1)	$I_{(AV)}$	5.0	Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	100.0	Amp
Maximum Forward Voltage at 5.0A (Note 1)	V_F	0.85	Volts
Maximum Reverse Current at $T_A=25^\circ\text{C}$	I_R	0.5	mAmp
at Rated DC Blocking Voltage $T_A=100^\circ\text{C}$		10.0	
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	60.0	°C/W
Operating Junction Temperature Range	T_J	-65 to +150	°C
Storage Temperature Range	T_{stg}	-65 to +150	°C

NOTES:

- 1- Pulse test: 300µs pulse width, 1% duty cycle
- 2- Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.2" × 0.2" (5.0 mm × 5.0 mm) copper pad areas



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RATINGS AND CHARACTERISTIC CURVES

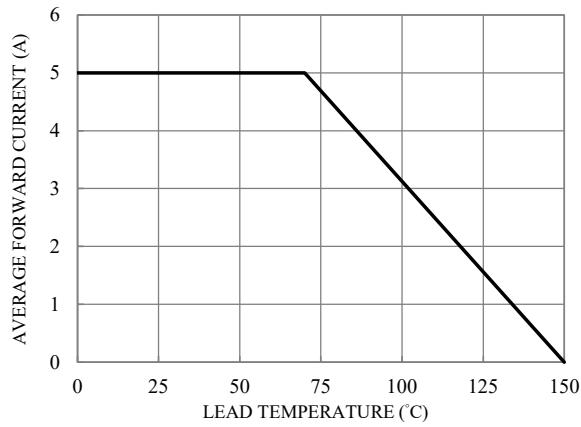


Fig.1-FORWARD CURRENT DERATING CURVE

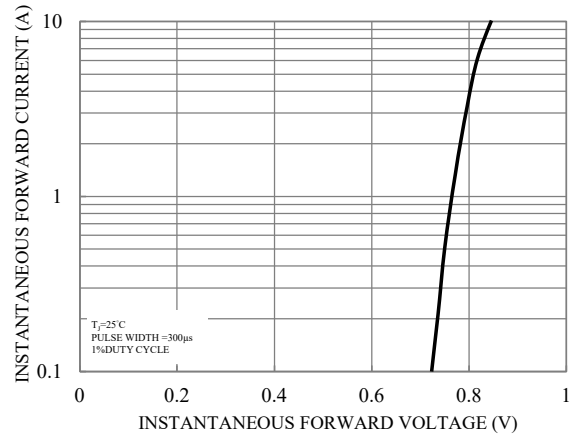


Fig.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

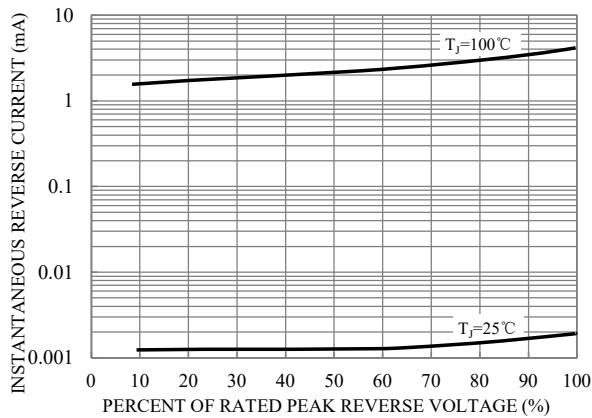


Fig.3-TYPICAL REVERSE CHARACTERISTICS

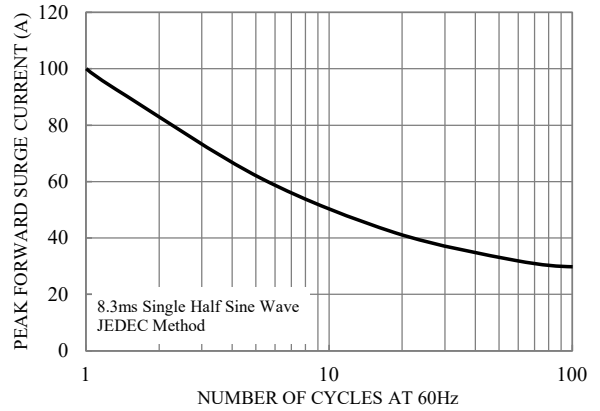


Fig.4-MAXIMUM NON-REPETITIVE SURGE CURRENT