



SK32A THRU SK320A

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

REVERSE VOLTAGE: 20 to 200 VOLTS
FORWARD CURRENT: 3.0 AMPERE

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- For surface mounted applications
- High current capacity
- Built-in strain relief
- Low profile package
- Metal to silicon rectifier. majority carrier conduction
- High surge capacity
- Low power loss, high efficiency
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- High temperature soldering : 260°C /10 seconds at terminals
- Suffix " H " indicated Halogen-free part, ex.SK32AH

MECHANICAL DATA

Case : Molded plastic, DO-214AC(SMA)

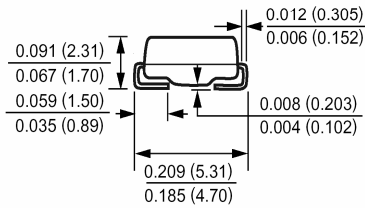
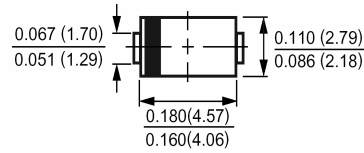
Terminals : Solder plated, solderable per MIL-STD-750, method 2026 guaranteed

Polarity : Color band denotes cathode end

Packaging: 12mm tape per EIA STD RS-481

Weight : 0.002 ounce, 0.064 gram

DO-214AC(SMA)



Dimensions in inches 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	SK32A	SK33A	SK34A	SK35A	SK36A	SK38A	SK310A	SK315A	SK320A	Units	
		SK32	SK33	SK34	SK35	SK36	SK38	SK310	SK315	SK320		
Marking Code		SK32	SK33	SK34	SK35	SK36	SK38	SK310	SK315	SK320		
Maximum Recerrent Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	80	100	150	200	Volts	
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	56	71	105	140	Volts	
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	80	100	150	200	Volts	
Maximum Average Forward Rectified Current at T_L (See Fig. 1)	$I_{(AV)}$	3.0									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 3.0A (Note 1)	V_F	0.50	0.55	0.75	0.85	0.95						Volts
Maximum Reverse Current at $T_A=25^\circ\text{C}$ at Rated DC Blocking Voltage $T_A=100^\circ\text{C}$	I_R	0.5									mAmp	
		20.0										
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	55.0									°C/W	
	$R_{\theta JL}$	17.0										
Operating Junction Temperature Range	T_J	-65 to +125									°C	
Storage Temperature Range	T_{stg}	-65 to +150									°C	

NOTES:

1- Pulse test: 300µs pulse width, 1% duty cycle

2- P.C.B. mounted with 0.55 x 0.55" (14 x 14mm) Copper Pad Areas



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RATINGS AND CHARACTERISTIC CURVES

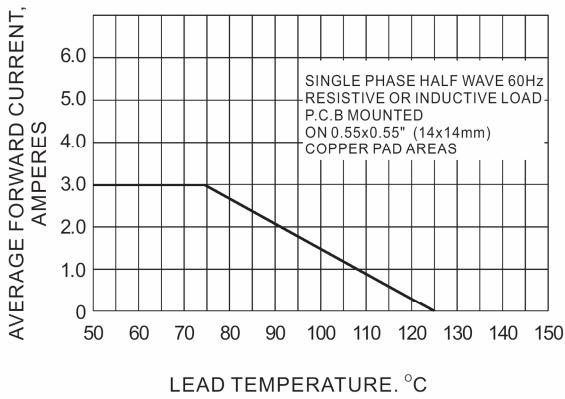


Fig.1- FORWARD CURRENT DERATING CURVE

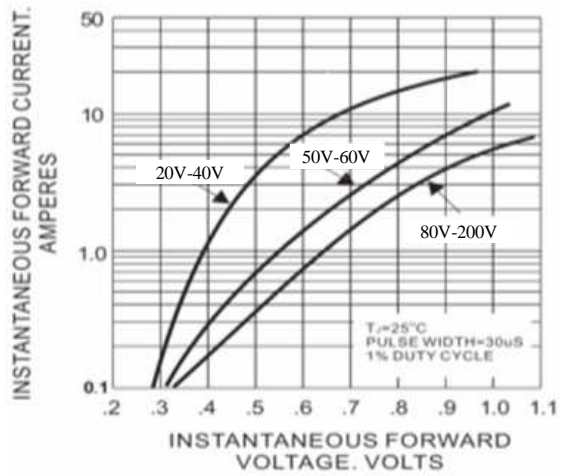


Fig.2- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

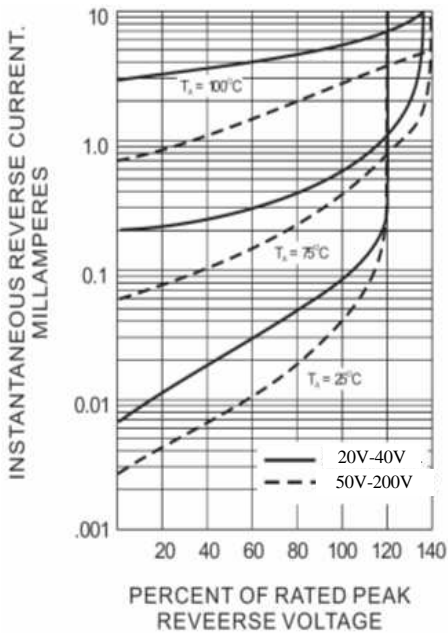


Fig.3- TYPICAL REVERSE CHARACTERISTICS

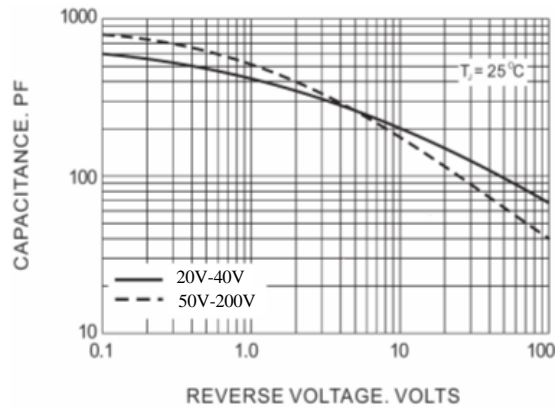


Fig.4- TYPICAL JUNCTION CAPACITANCE

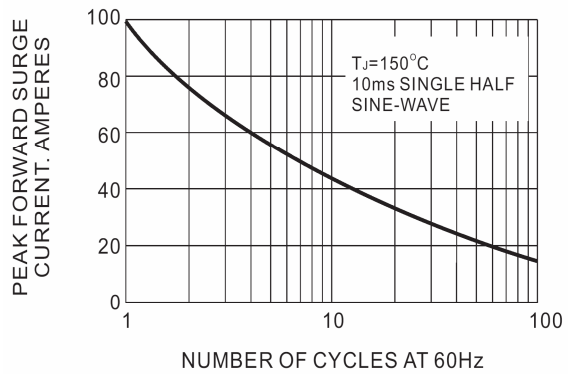


Fig.5- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT