

# HITANO ENTERPRISE CORP.

## SK32 THRU SK310

### TECHNICAL SPECIFICATIONS OF SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE - 20 to 80 Volts

CURRENT - 3.0 Amperes

#### FEATURES

- \* Ideal for surface mounted applications
- \* Low leakage current
- \* Glass passivated junction

#### MECHANICAL DATA

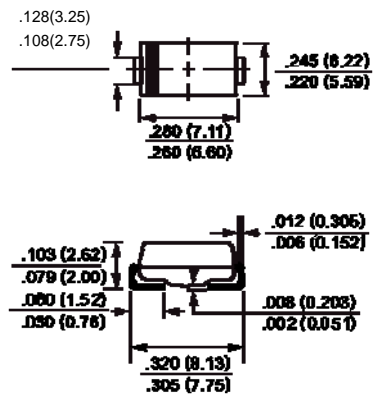
- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rateflame retardant
- \* Terminals: Solder plated solderable per MIL-STD-750, Method 2026
- \* Polarity: As marked
- \* Mounting position: Any
- \* Weight: 0.24 gram

#### 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%.



SMC (DO-214AB)



Dimensions in inches and (millimeters)

	SYMBOL	.SK32	SK33	SK34	SK35	SK36	SK38	SK310	UNIT
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	20	30	40	50	60	80	100	Volts
Maximum RMS Voltage	$V_R$	14	21	28	35	42	56	70	Volts
Maximum DC Blocking Voltage	$V$	20	30	40	50	60	80	100	Volts
Maximum Average Forward Rectified Current at Derating Lead Temperature	$I_{F(AV)}$	3.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	100							Amps
Maximum Instantaneous Forward Voltage at 3.0A DC	$V$	0.55		0.		0.85		Volts	
Maximum DC Reverse Current at Rated DC Blocking Voltage	@ $T_A = 25^\circ\text{C}$	2.0							mAmps
	@ $T_A = 100^\circ\text{C}$	20							
Typical Thermal Resistance (Note 1)	$R_{\theta JA}$					55			$^\circ\text{C/W}$
Typical Junction Capacitance (Note 2)	$C$					200			pF
Operating Temperature Range	$T$					-55 to + 125			$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$					-55 to +150			$^\circ\text{C}$

- NOTES: 1. Thermal Resistance (Junction to Ambient).  
 2. Measured at 1 MHz and applied reverse voltage of 4.0 volts.  
 3. P.C.B Mounted with 0.4X0.4in<sup>2</sup> (10.0X10.0mm<sup>2</sup>) copper pad area.

RATING AND CHARACTERISTIC CURVES ( SK32 THRU SK38 )

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

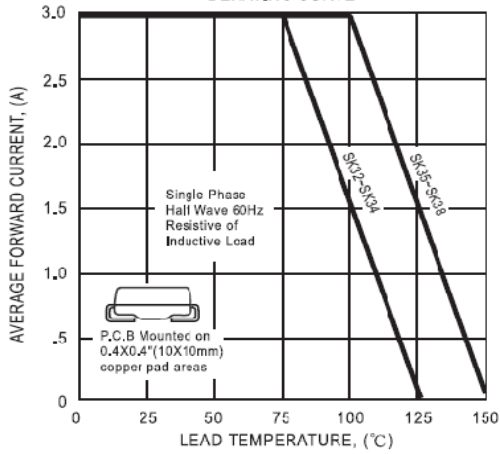


FIG. 2 - TYPICAL REVERSE CHARACTERISTICS

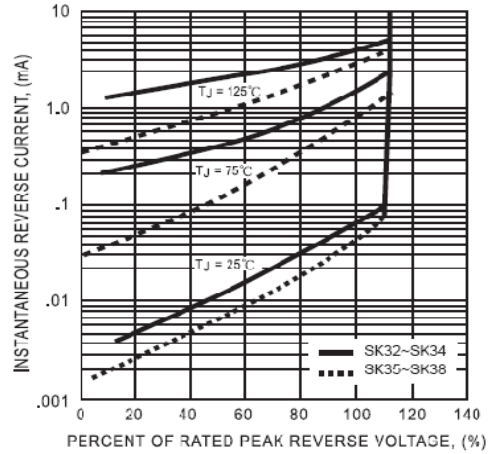


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

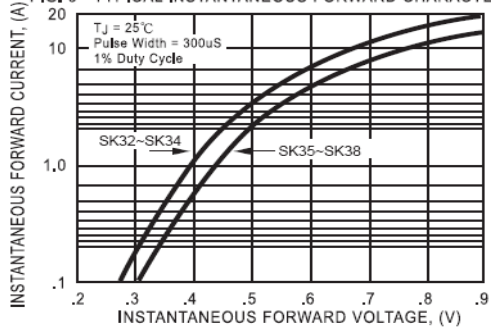


FIG. 4 - TYPICAL JUNCTION CAPACITANCE

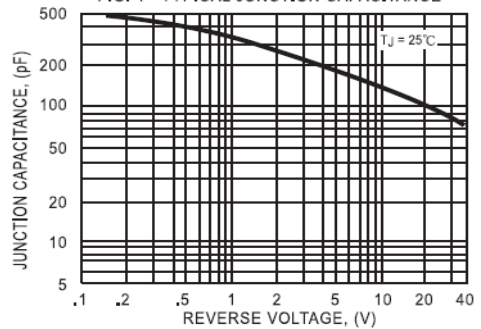


FIG. 5 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

