



HITANO ENTERPRISE CORP.

S3A THRU S3M

TECHNICAL SPECIFICATIONS OF SURFACE MOUNT SILICON RECTIFIER

VOLTAGE RANGE - 50 to 1000 Volts

CURRENT - 3.0 Amperes

FEATURES

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

MECHANICAL DATA

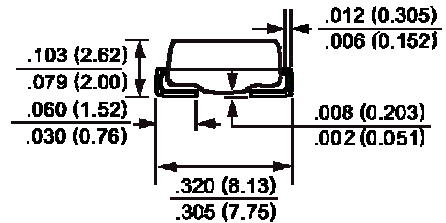
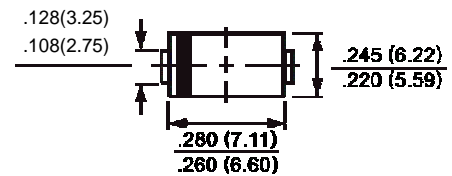
- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- * Polarity: As marked
- * Mounting position: Any
- * Weight: 0.24 gram

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	S3A	S3B	S3D	S3G	S3J	S3K	S3M	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current $T_A = 75^\circ C$	I_o	3.0							Amps
Peak Forward Surge Current IFM(surge): 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	100							Amps
Maximum Forward Voltage at 3.0A DC	V_F	1.2							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	@ $T_A = 25^\circ C$							uAmps
		@ $T_A = 125^\circ C$							
Maximum Reverse Recovery Time (Note 3)	t_{rr}	2.5							uSec
Typical Thermal Resistance (Note 2)	$R_{\theta JL}$	10							$^\circ C/W$
Typical Junction Capacitance (Note 1)	C_j	60							pF
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to + 175							$^\circ C$

- NOTES : 1. Measured at 1 MHz and applied reverse voltage of 4.0VDC
 2. Thermal Resistance (Junction to Ambient), 0.4x0.4in² (10X10mm²) copper pads to each terminal.
 3. Test Conditions: IF=0.5A, IR=1.0A, IRR=0.25A.

RATING AND CHARACTERISTIC CURVES (S3A THRU S3M)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

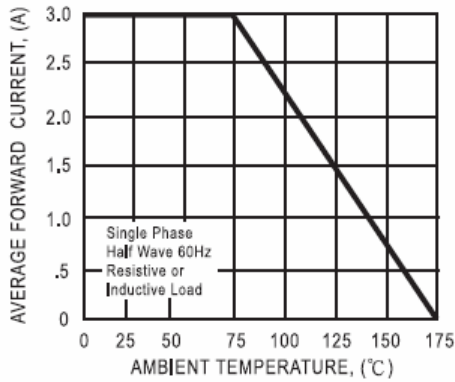


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

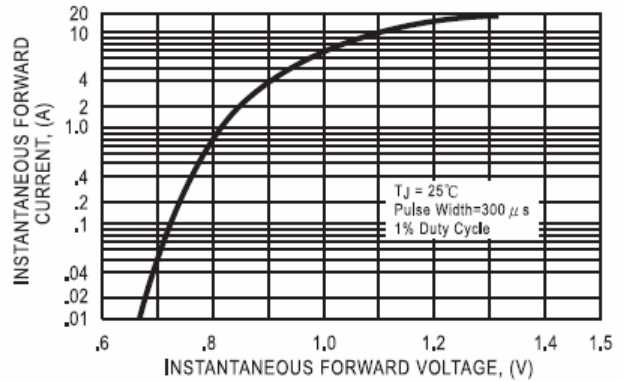


FIG. 3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

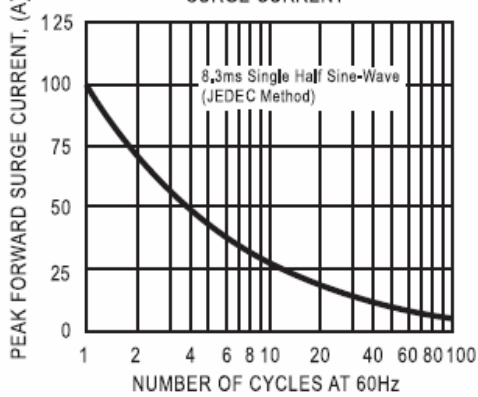


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

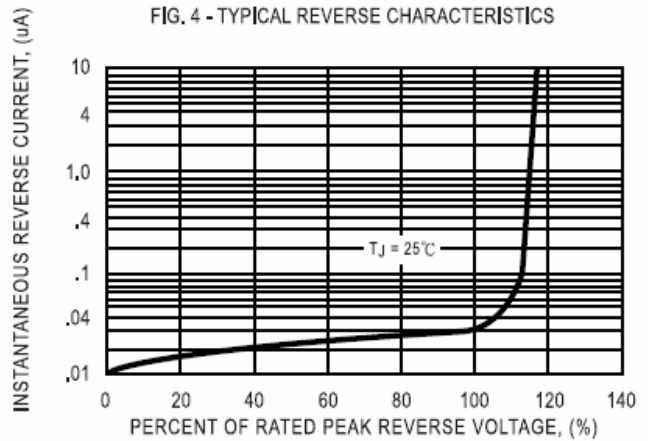


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

