



YENYO

# S1A THRU S1M

Surface Mount Standard Rectifier

## Features

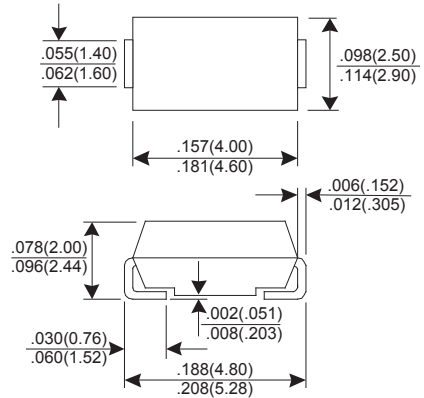
- ★ Low forward voltage drop
- ★ High current capability
- ★ Low reverse leakage current
- ★ High surge current capability
- ★ Glass passivated chip
- ★ Qualified as per AEC-Q101

## Mechanical Data

- ★ Case: Molded plastic SMA/DO-214AC
- ★ Epoxy: UL 94V-0 rate flame retardant
- ★ Terminals: Solderable per MIL-STD-750 method 2026
- ★ Polarity: Color band denotes cathode end
- ★ Mounting position: Any
- ★ Weight: 0.064 gram

**Voltage Range 50 to 1000 V  
Current 1.0 Ampere**

### SMA/DO-214AC



Dimensions in inches and (millimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

CHARACTERISTIC	SYMBOL	S1A	S1B	S1D	S1G	S1J	S1K	S1M	UNIT
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current TA=110°C	IAV	1.0							A
Peak Forward Surge Current, 8.3ms single Half sine-wave superimposed on rated load (JEDEC method)	IFSM	30							A
Maximum Instantaneous Forward Voltage @ 1.0 A	VF	1.1							V
Maximum DC Reverse Current @TJ=25°C At Rated DC Blocking Voltage @TJ=125°C	IR	5.0 100							uA uA
Typical junction Capacitance (Note 1)	CJ	12							pF
Typical Thermal Resistance (Note 2)	RθJA	75					85		°C/W
Operating Junction and Storage Temperature Range	TJ,TSTG	-55 to +150							°C

NOTES : (1) Thermal Resistance junction to ambient.  
(2) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts DC.

# RATINGS AND CHARACTERISTIC CURVES S1A THRU S1M

FIG.1 - FORWARD CURRENT DERATING CURVE

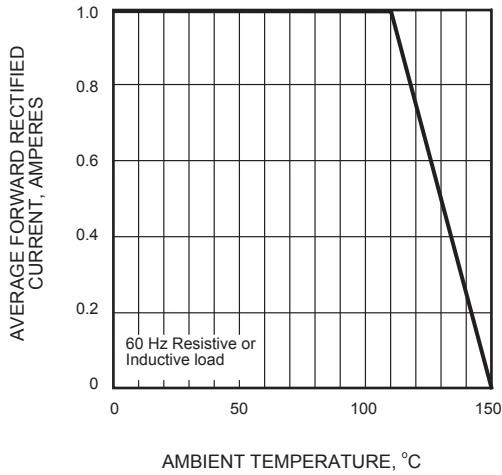


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

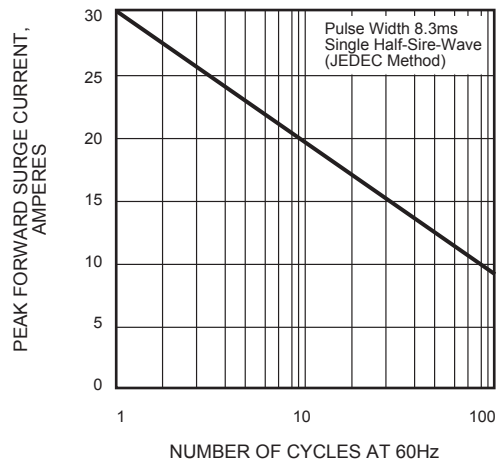


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

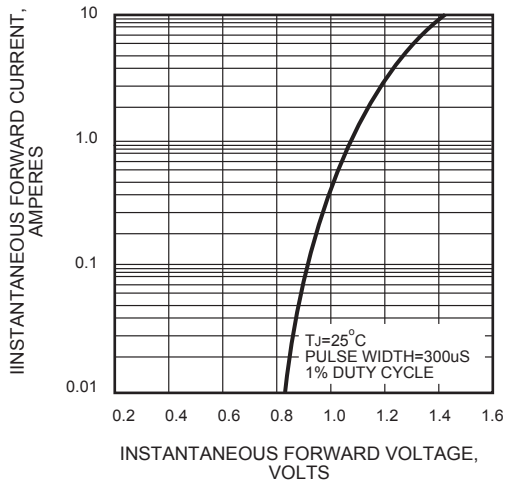


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

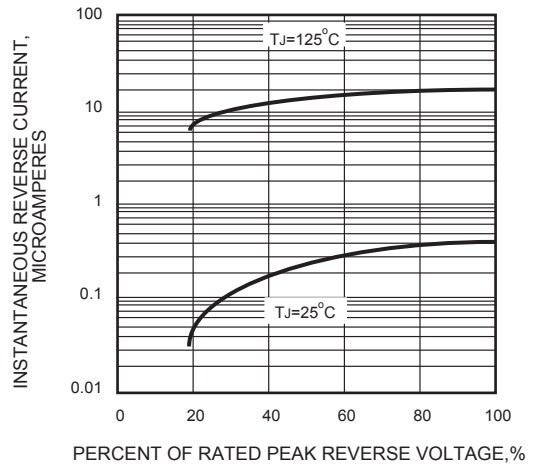


FIG.5 - TYPICAL JUNCTION CAPACITANCE

