Website: www.kingtronics.com Email: info@kingtronics.com Tel: (852) 8106 7033 Fax: (852) 8106 7099

S1A THRU S1M

SURFACE MOUNT GENERAL RECTIFIER

Reverse Voltage - 50 to 1000 Volts Forward Current - 1.0 Ampere

FEATURES

The plastic package carries Underwriters Laboratory

Flammability Classification 94V-0

- ◆For surface mounted applications
- ◆Low reverse leakage
- Built-in strain relief, ideal for automated placement
- High forward surge current capability
- ♦ High temperature soldering guaranteed:

250°C/10 seconds at terminals

MECHANICAL DATA

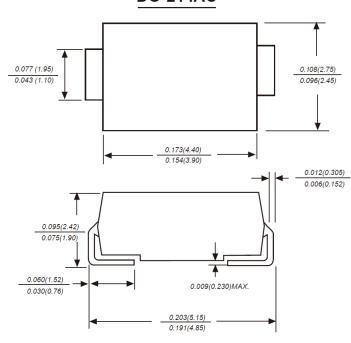
Case: JEDEC DO-214AC molded plastic body

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

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight: 0.075 grams



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 $^\circ\!\!\mathbb{C}$ ambient temperature unless otherwise specified.

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

	SYMBOLS	S1A	S1B	S1D	S1G	S1J	S1K	S1M	UNITS
Maximum repetitive peak reverse voltage	VRRM	50	100	200	400	600	800	1000	VOLTS
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	VOLTS
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	VOLTS
Maximum average forward rectified current at TL=55 $^\circ\! {\rm C}$	I(AV)	1.0							Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	Іғѕм	30.0							Amps
Maximum instantaneous forward voltage at 1.0A	VF	1.1							Volts
Maximum DC reverse current Ta=25 $^\circ\!\!{\rm C}$ at rated DC blocking voltage Ta=100 $^\circ\!\!{\rm C}$	IR	5.0 50.0							μΑ
Typical junction capacitance (NOTE 1)	Сл	15.0							pF
Typical thermal resistance (NOTE 2)	Reja	75.0							°C /W
Operating junction and storage temperature range	TJ,TSTG	-65 to +175							°C

Note: 1.Measured at 1MHz and applied reverse voltage of 4.0V D.C.

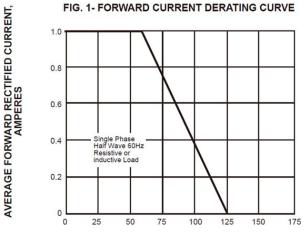
2.P.C.B. mounted with 0.2x0.2"(5.0x5.0mm) copper pad areas

DO-214AC

S1A THRU S1M

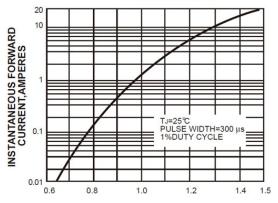
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RATINGS AND CHARACTERISTIC CURVES S1A THRU S1M



AMBIENT TEMPERATURE, °C





INSTANTANEOUS FORWARD VOLEAGE, VOLTS

FIG. 5-TYPICAL JUNCTION CAPACITANCE

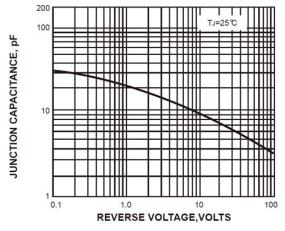


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

NUMBER OF CYCLES AT 60 Hz

FIG. 4-TYPICAL REVERSE CHARACTERISTICS

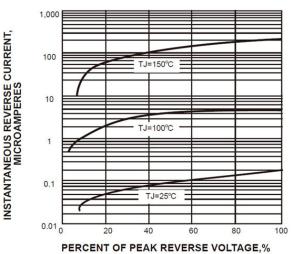
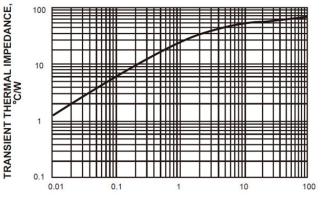


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE



t,PULSE DURATION,sec.

Note: Specifications are subject to change without notice.