Kingtronics®

S2AA THRU S2MA

VOLTAGE RANGE 50 to 1000 Volts CURRENT 2.0 Ampere

SURFACE MOUNT GLASS PASSIVATED RECTIFIER

FEATURE

Plastic package has underwrites laboratory flammability Classification 94V-0

For surface mounted applications

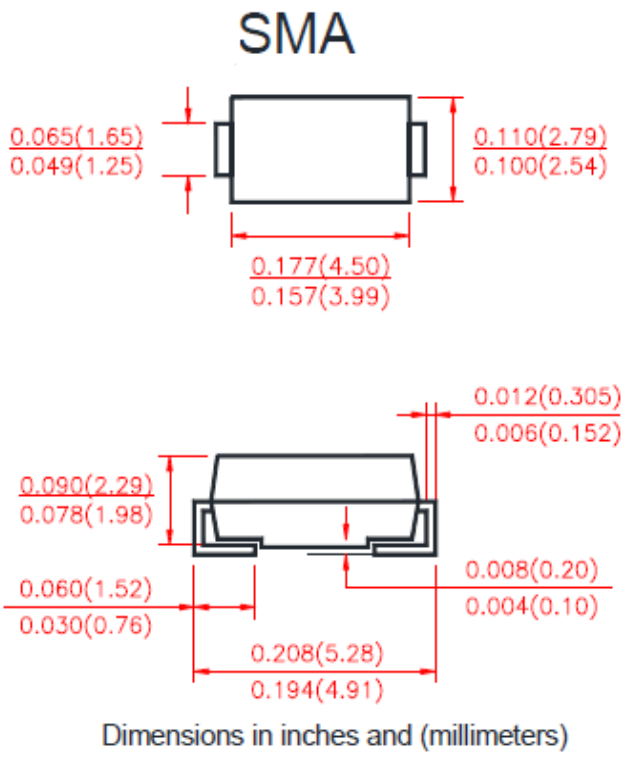
Low profile package

Built-in strain relief, ideal for automated placement

Glass Passivated chip junction

High temperature soldering guaranteed

250℃/10 second at terminals



Dimensions in inches and (millimeters)

MECHANICAL DATA

Case: JEDED SMA molded plastic over glass passivated chip

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

Polarity: Color band denotes cathode end

SURFACE MOUNT GLASS PASSIVATED RECTIFIER

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified

MAXIMUM RATINGS & THERMAL CHARACTERISTICS

TYPE NUMBER	Symbol	S2AA	S2BA	S2DA	S2GA	S2JA	S2KA	S2MA	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 T_L =100℃	$IF_{(AV)}$	2.0							Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method) T_L=100℃	IFSM	50							Amps
Typical Thermal Resistance (NOTE 1)	$R_{\theta JA}$	53							℃/W
	RθJL	16							
Operating and Storage Temperature Range	TJ,TSTG	-55 to +150							°C

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ELECTRICAL CHARACTERISTICS

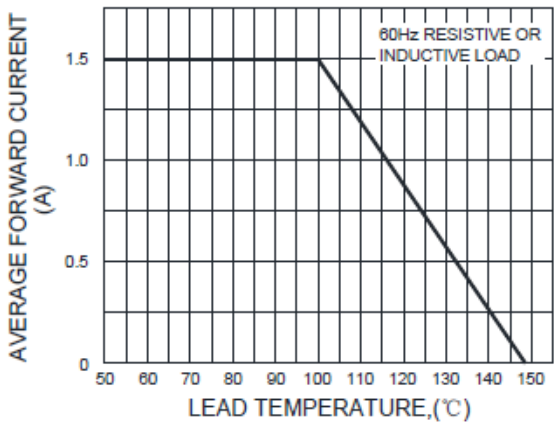
		Symbol	S2AA	S2BA	S2DA	S2GA	S2JA	S2KA	S2MA	UNITS
Maximum Instantaneous Forward Voltage at 1.5A		V_F	1.10							Volts
Maximum DC Reverse Current at rated DC Blocking Voltage	T_A = 25℃	I_R	5.0							μA
	T_A = 125℃		200							
Typical Reverse Recovery Time at IF=0.5A, IR=1.0A, IRR=0.25A,		Trr	2.5							μs
Typical junction capacitance at 4.0V, 1MHz		CJ	30							pF

Notes:

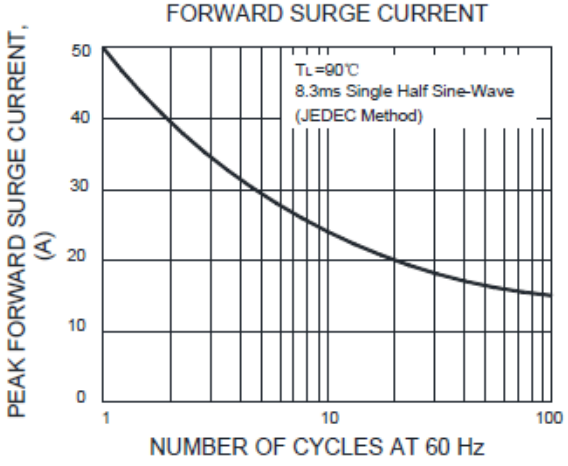
1. Thermal resistance from Junction to ambient and from junction to lead mounted on P.C.B.with 0.3×0.3″(8.0 × 8.0mm) copper pad areas.

RATINGS AND CHARACTERISTIC CURVES

F1G.1-FORWARD CURRENT DERATING CURVE



F1G.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



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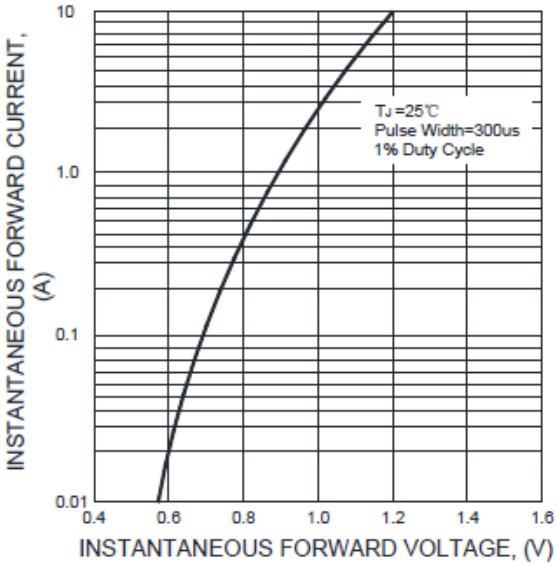
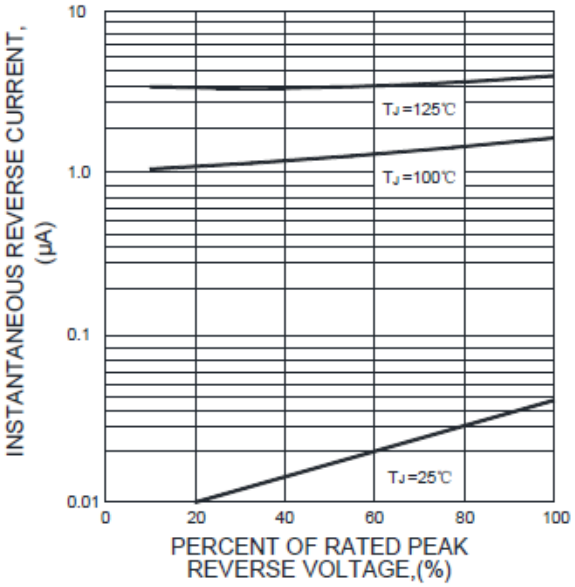
F1G.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



F1G.4-TYPICAL REVERSE CHARACTERISTICS



F1G.5-TYPICAL JUNCTION CAPACITANCE