

Kingtronics®

S2AA THRU S2MA

FEATURE

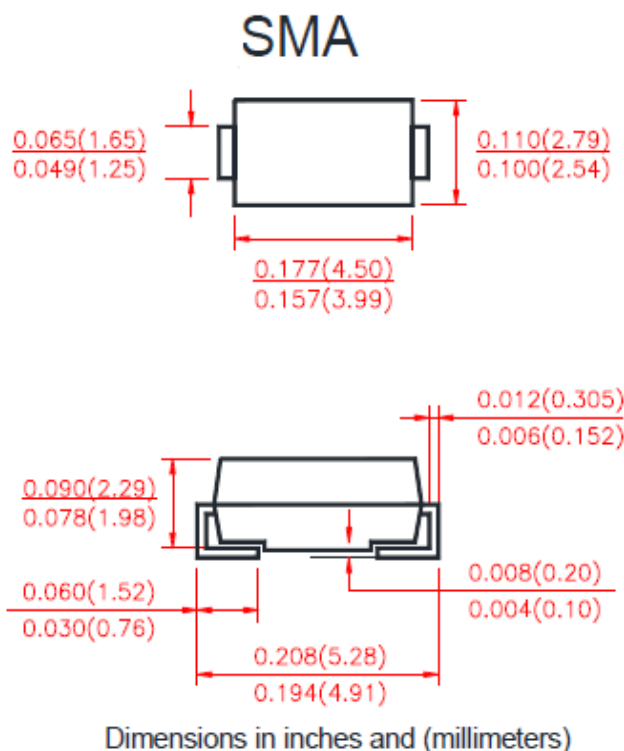
Plastic package has underwrites laboratory flammability
Classification 94V-0
For surface mounted applications
Low profile package
Built-in strain relief, ideal for automated placement
Glass Passivated chip junction
High temperature soldering guaranteed
250°C/10 second at terminals

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

VOLTAGE RANGE 50 to 1000 Volts CURRENT 2.0 Ampere

SURFACE MOUNT GLASS PASSIVATED RECTIFIER



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C 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°C	I _{F(AV)}				2.0				Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method) T _L =100°C	IFSM				50				Amps
Typical Thermal Resistance (NOTE 1)	R _{θJA}				53				°C/W
	R _{θJL}				16				
Operating and Storage Temperature Range	T _J ,T _{STG}				-55 to +150				°C

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ELECTRICAL CHARACTERISTICS

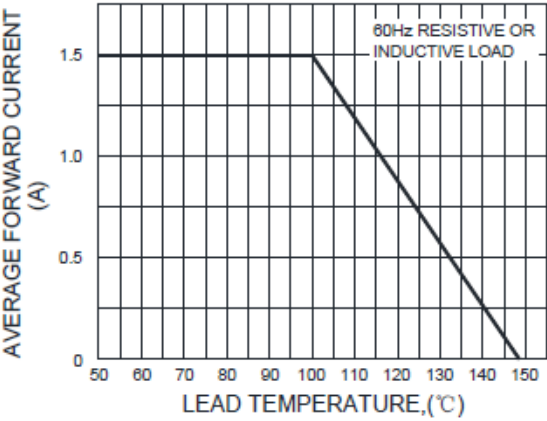
	Symbol	S2AA	S2BA	S2DA	S2GA	S2JA	S2KA	S2MA	UNITS
Maximum Instantaneous Forward Voltage at 1.5A	V_F				1.10				Volts
Maximum DC Reverse Current at rated DC Blocking Voltage	I_R				5.0				μA
					200				
Typical Reverse Recovery Time at IF=0.5A, IR=1.0A, IRR=0.25A,	T_{rr}				2.5				μs
Typical junction capacitance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

Notes:

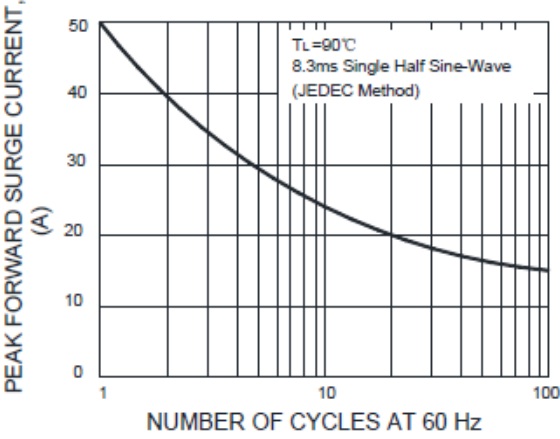
1. Thermal resistance from Junction to ambient and from junction to lead mounted on P.C.B.with 0.3×0.3"(8.0 × 8.0mm) copper pad areas.

RATINGS AND CHARACTERISTIC CURVES

F1G.1-FORWARD CURRENT DERATING CURVE



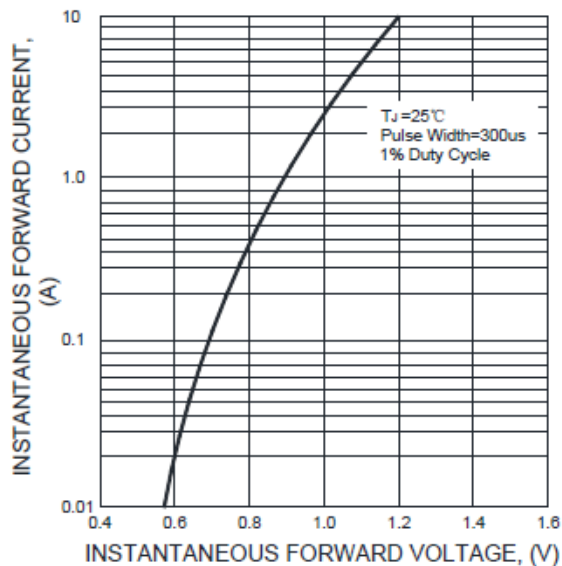
F1G.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



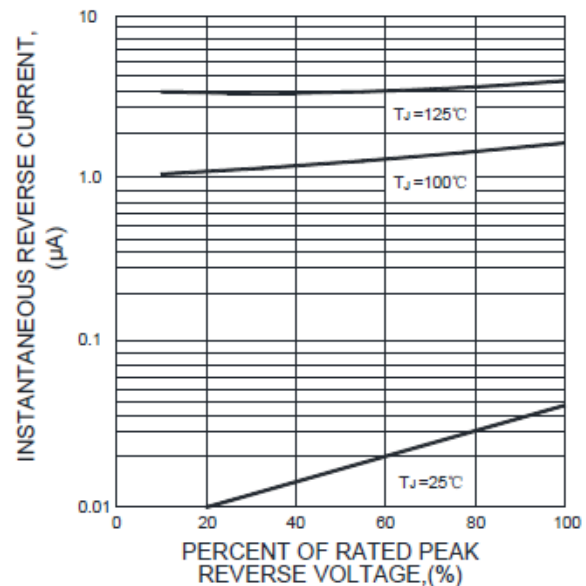
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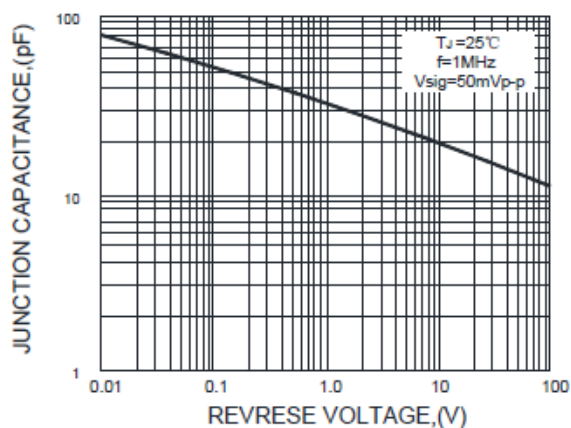
F1G.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



F1G.4-TYPICAL REVERSE CHARACTERISTICS



F1G.5-TYPICAL JUNCTION CAPACITANCE



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