

RS1A THRU **RS1M**

SURFACE MOUNT FAST RECOVERY GLASS PASSIVATED RECTIFIERS

FEATURES:

- Plastic package has Underwriters
- Flammability Classification 94V-0
- For surface mounted applications in order to optimize bord space
- Low profile package
- Built-in strain relief, ideal for automated placement
- Fast switching for high efficiency
- Glass passivated chip junction
- High temperature soldering :
- 250 °C /10 seconds at terminals

MECHANICAL DATA

Case: JEDEC DO-214AC molded plastic over passivated chip Terminals: Solder plated, solderable perMIL-STD-750, Method 2026 Polarity: Color band denotes cathode end

Weight:0.064 grams



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25° C ambient temp. unless otherwise specified.

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

Characteristic		Symbol	RS1A	RS1B	RS1D	RS1G	RS1J	RS1K	RS1M	Units
Maximum recurrent peak reverse voltage		VRRM	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage		VRMS	35	70	140	280	420	560	7000	Volts
Maximum DC blocking voltage		VDC	50	100	200	400	600	800	1000	Volts
Maximum average forward rectified current at TL= 5 5 $^{\circ}$ C		lo	1.0							Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load(JEDEC Method)		IFSM	30.0							Amps
Maximum Instantaneous forward voltage at 1.0 A		VF	1.30							Volts
Maximum DC reverse current at rated DC blocking voltage	Ta=25 ° C Ta=125 ° C	IR	5.0 200						μA	
Maximum reverse recovery time	(Note1)	trr	150			250	500		nS	
Typical junction capacitance	(Note2)	Сл	15							pF
Typical Themai Resistance, junction to Lead		RT0-JL	20							⁺c/w
Operating and storage temperature range		TJ,Tstg	-65to +150							°C

NOTES:

(1) Reverse recovery test condition : I F=0.5A, IR=1.0A, Irr=0.25A

(2) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts

(3) Thermal resistance from Junction to lead mounted on P.C.B. with 0.2x0.2"(5.0x5.0mm) copper Pad areas



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RATINGS AND CHARACTERISTIC CURVES





NUMBER OF CYCLES AT 60 Hz

FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



FIG.4-TYPICAL REVERSE CHARACTERISTICS



PERCENT OF RATED PEAK REVERSE VOLTAGE. %



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