

## **R1A THUR R1M**

GLASS PASSIVATED FAST RECOVERY RECTIFIER

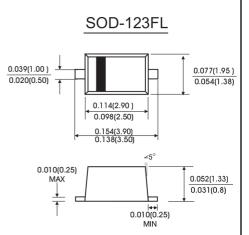
Reverse Voltage: 50 to 1000 Volts Forward Current: 1.0 Ampere

#### **FEATURES**

- · Glass passivated junction
- · For Surface Mount Applications, Easy to pick and place
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- · High temperature soldering guaranteed:260°C/10 seconds at terminals,
- · Component in accordance to RoHS 2011/65/EU

### MECHANICAL DATA

- · Case: SOD-123FL molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- · Polarity: Color band denotes cathode end
- · Mounting Position: Any



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%.)

		Symbols	R1A	R1B	RID	RIG	R1J	R1K	R1M	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	700	Volts
Maximum DC Blocking Voltage		VDC	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current		l(AV)	1.0							Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)		lfsm	30							Amps
Maximum Instantaneous Forward Voltage at 1.0 A		VF	1.3							Volts
Maximum DC Reverse Current	TA=25°C	lo.	5.0							μΑ
at rated DC blocking voltage	TA=125°C	lr	50							
Maximum reverse recovery time(Note1)		trr	150			250	50	00	ns	
Typical junction capacitance(Note2)		CJ	15.0						рF	
Operating junction and storage temperature range		Tu Tstg	-55 to+150							°C

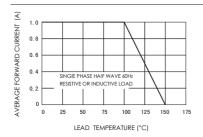
Note: 1.Test conditions: IF=0.5A,IR=1.0A,IRR=0.25A.

2. Measured at 1 MHz and applied reverse voltage of 4.0 Volts D.C.

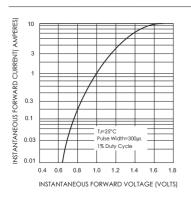


## RATINGS AND CHARACTERISTIC CURVES R1A THRU R1M

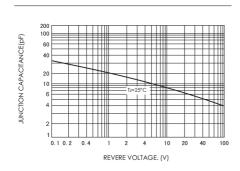
## FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE



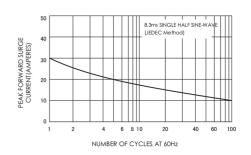
## FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



#### FIG.5-TYPICAL JUNCTION CAPACITANCE



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



#### FIG.4-TYPICAL REVERE CHARACTERISTICS

