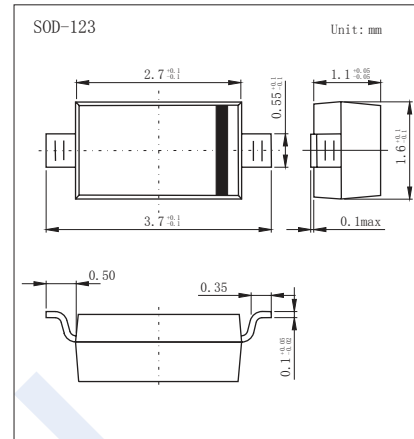


## Fast Recovery Diodes

## RS1AL ~ RS1ML

## ■ Features

- For surface mounted application
- Glass passivated junction chip
- Fast switching for high efficiency
- Plastic material used carries Underwriters Laboratory Classification 94V-0



## ■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	RS 1AL	RS 1BL	RS 1DL	RS 1GL	RS 1JL	RS 1KL	RS 1ML	Unit	
Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V	
RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700		
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000		
Forward Voltage @ 0.8A (Note.1)	V <sub>F</sub>	1.3								A
Averaged Forward Current T <sub>L</sub> =90°C	I <sub>FAV</sub>	0.8								
Peak Forward Surge Current Ta=25°C	I <sub>FSM</sub>	30								
Maximum DC Reverse Current Ta=25°C	I <sub>R</sub>	5								μA
Ta=125°C		50								
Maximum Reverse Current (Note.2)	t <sub>rr</sub>	150			250	500		ns		
Typical Junction Capacitance (Note.3)	C <sub>j</sub>	10								pF
Thermal Resistance Junction to Ambient	R <sub>θJA</sub>	105								°C/W
Thermal Resistance Junction to Lead	R <sub>θJL</sub>	32								
Junction Temperature	T <sub>j</sub>	150								°C
Storage Temperature	T <sub>stg</sub>	-55 to 150								

Note.1: Pulse Test with PW=300 usec, 1% Duty Cycle

Note.2: Reverse Recovery Test Conditions: I<sub>F</sub>=0.5A, I<sub>R</sub>=1.0A, I<sub>RR</sub>=0.25A

Note.3: Measured at 1 MHz and Applied Reverse Voltage of 4.0V D.C.

## ■ Marking

NO	RS1AL	RS1BL	RS1DL	RS1GL	RS1JL	RS1KL	RS1ML
Marking	RS1A	RS1B	RS1D	RS1G	RS1J	RS1K	RS1M

# Fast Recovery Diodes

## RS1AL ~ RS1ML

### Typical Characteristics

FIG.1 FORWARD CURRENT DERATING CURVE

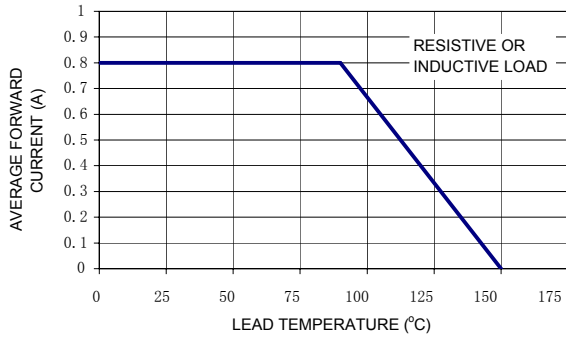


FIG. 2 TYPICAL REVERSE CHARACTERISTICS

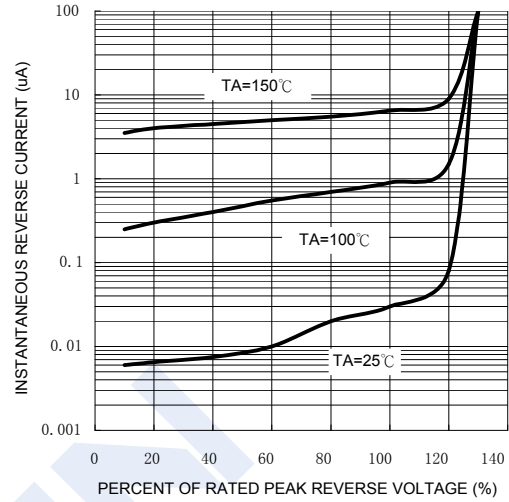


FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

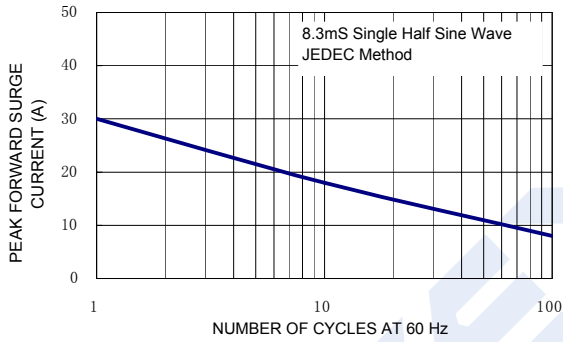


FIG. 5 TYPICAL FORWARD CHARACTERISTICS

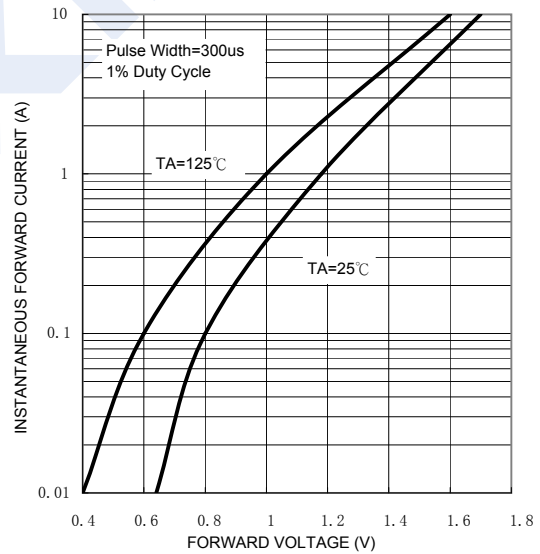


FIG. 4 TYPICAL JUNCTION CAPACITANCE

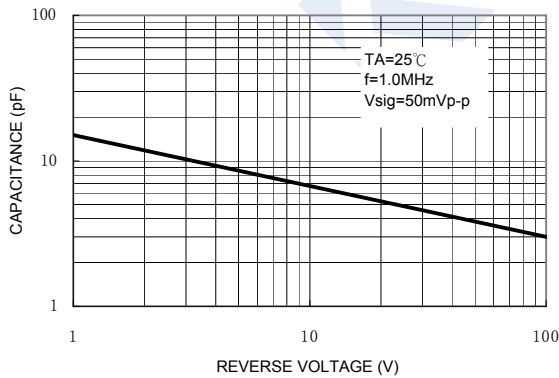


FIG.6- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

