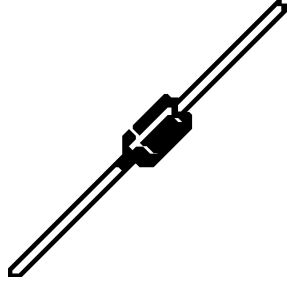


# 2.5 Amp MINIATURE PLASTIC SILICON RECTIFIERS

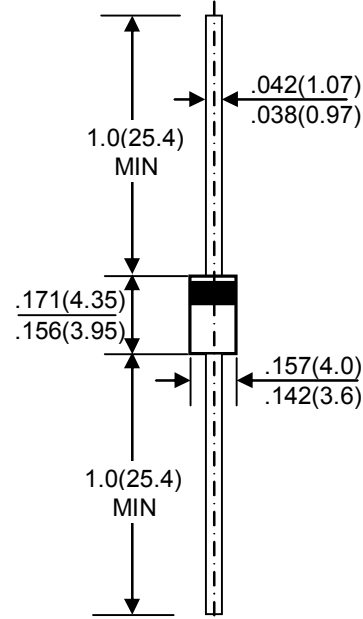
## MECHANICAL DIMENSIONS

### Description

**RL251S~257S**



R-3



### FEATURES

- Low cost
- Diffused junction
- Low forward voltage drop
- Low reverse leakage current
- High current capability

### MECHANICAL DATA

Case: JEDEC R-3 molded plastic  
 Polarity: Color band denotes cathode  
 Weight: 0.021 ounces , 0.58 grams  
 Mounting position: Any  
 The plastic material carries UL recognition 94V-0

## 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%

CHARACTERISTICS	SYMBOL	RL251S	RL252S	RL253S	RL254S	RL255S	RL256S	RL257S	UNIT
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @TA =70 °C	I(AV)	2.5							A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load(JEDEC Method)	IFSM	90							A
Maximum Peak Forward Voltage at 2.5A DC	VF	1.1							V
Maximum DC Reverse Current @TJ=25°C at Rated DC Blocking Voltage @TJ=100°C	IR	5.0 / 50							uA
Typical Junction Capacitance (Note1)	CJ	25							pF
Typical Thermal Resistance (Note2)	RθJA	30							°C/W
Operating Temperature Range	TJ	-55 to +125							°C
Storage Temperature Range	TSTG	-55 to +125							°C

NOTES:1.Measured at 1.0 MHz and applied reverse voltage of 4.0V DC

2.Thermal resistance junction of ambient.

# 2.5 Amp MINIATURE PLASTIC SILICON RECTIFIERS

FIG. 1 – FORWARD CURRENT DERATING CURVE

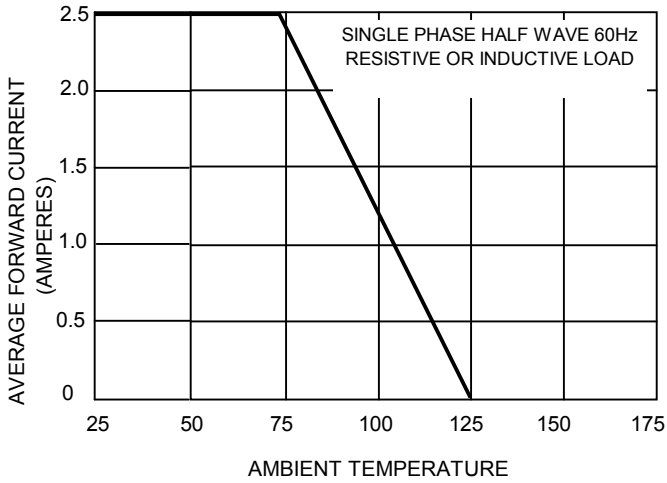


FIG. 2 – MAXIMUM NON-REPETITIVE SURGE CURRENT

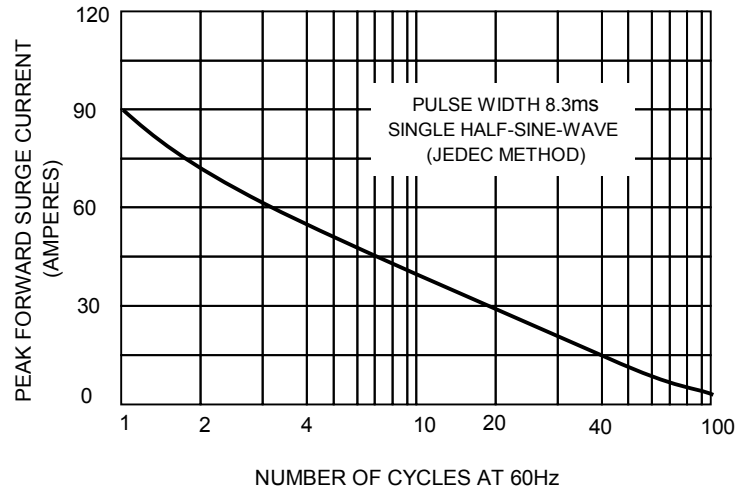


FIG.3 – TYPICAL JUNCTION CAPACITANCE

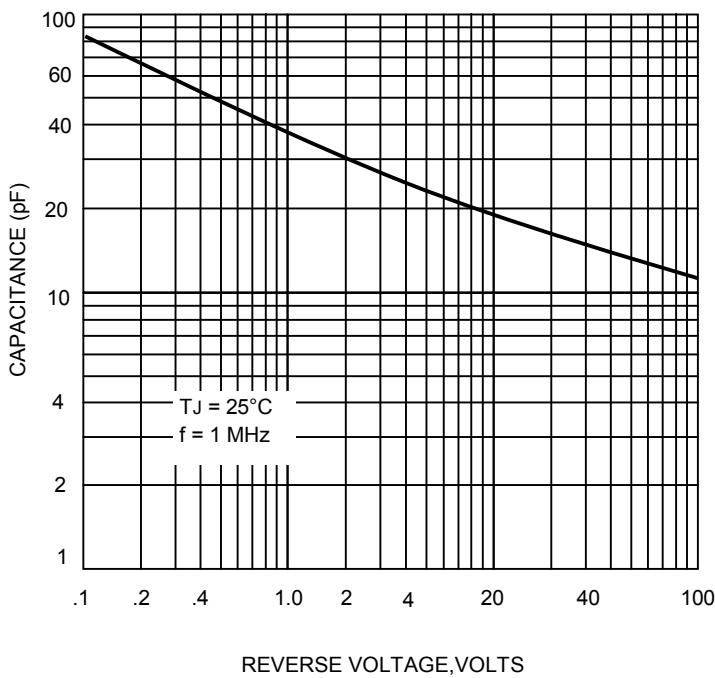


FIG.4-TYPICAL FORWARD CHARACTERISTICS

