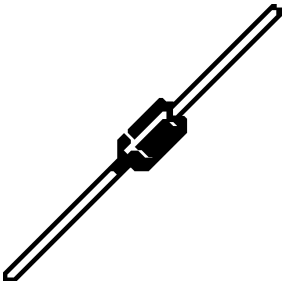
Semiconductor *Data Sheet*

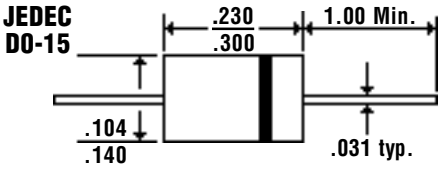
2.5 Amp MINIATURE PLASTIC SILICON RECTIFIERS

RL251 . . . 257 Series

Description



Mechanical Dimensions



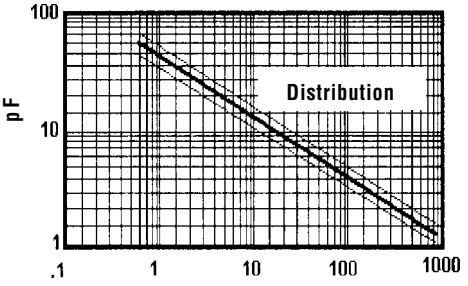
Features

- **LOW COST**
- **LOW LEAKAGE**
- **DIFFUSED JUNCTION**
- **MEETS UL SPECIFICATION 94V-0**

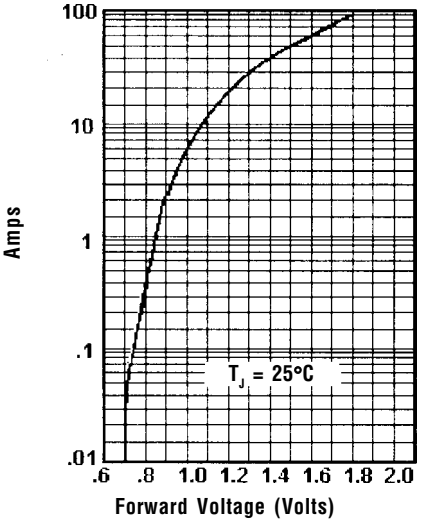
Electrical Characteristics @ 25°C.	***RL251 . . . RL257 Series***							**Units**
Maximum Ratings	**RL251**	**RL252**	**RL253**	**RL254**	**RL255**	**RL256**	**RL257**	
Peak Repetitive Reverse Voltage...V_{RRM}	50	100	200	400	600	800	1000	Volts
RMS Reverse Voltage...$V_{R(rms)}$	35	70	140	280	420	560	700	Volts
DC Blocking Voltage...V_{DC}	50	100	200	400	600	800	1000	Volts
Average Forward Rectified Current...$I_{F(av)}$ T_A = 55°C *(Note 3)*	..... 2.5							Amps
Non-Repetitive Peak Forward Surge Current...I_{FSM} @ Rated Current & Temp	..... 200							Amps
Forward Voltage @ 3.0A...V_F	..... 1.0							Volts
DC Reverse Current...I_R @ 25°C	..... 1.0							µAmps
@ Rated DC Blocking Voltage @ 75°C	..... 100							µAmps
Typical Junction Capacitance...C_J *(Note 1)*	< ..... 50 ..... >				< ..... 25 ..... >			pF
Typical Thermal Resistance...$R_{\theta JC}$ *(Note 2)*	..... 28							°C / W
Operating & Storage Temperature Range...T_J, T_{STRG}	..... -65 to 175							°C

2.5 Amp MINIATURE PLASTIC SILICON RECTIFIERS

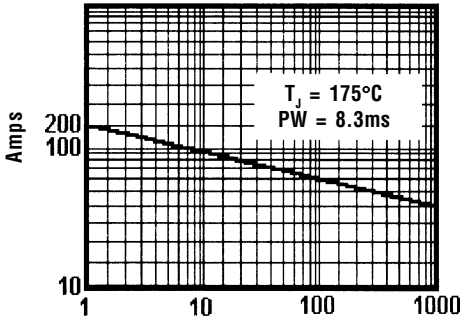
Typical Junction Capacitance



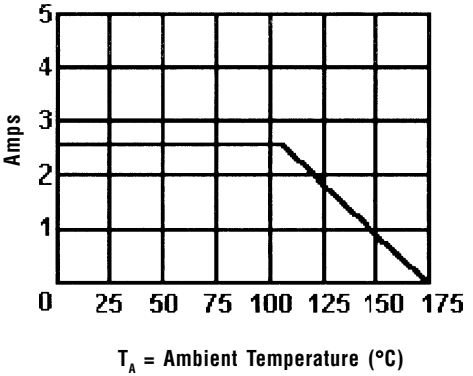
Instantaneous Forward Characteristics



Peak Forward Surge Current



Forward Current Derating Curve



Ratings at 25 Deg. C ambient temperature unless otherwise specified.

Single Phase Half Wave, 60 HZ Resistive or Inductive Load.

For Capacitive Load, Derate Current by 20%.

NOTES: 1. Measured @ 1 MHZ and applied reverse voltage of 4.0V.
2. Thermal Resistance Junction to Ambient, Jedec Method.
3. When Mounted to heat sink, from body.