

**Micro Commercial Components** 



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# RL251 THRU RL257

### **Features**

- Halogen free available upon request by adding suffix "-HF"
- Low Cost
- Low Leakage
- Low Forward Voltage Drop
- High Current Capability
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Lead Free Finish/Rohs Compliant (Note1) ("P"Suffix designates Compliant. See ordering information)

### Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Typical Thermal Resistance (R<sub>θJA</sub>) 35°C/W

MCC Catalog Number	Device Marking	Maximum Recurrent Peak Reverse	Maximum RMS Voltage	Maximum DC Blocking
		Voltage		Voltage
RL251		50V	35V	50V
RL252		100V	70V	100V
RL253		200V	140V	200V
RL254		400V	280V	400V
RL255		600V	420V	600V
RL256		800V	560V	V008
RL257		1000V	700V	1000V

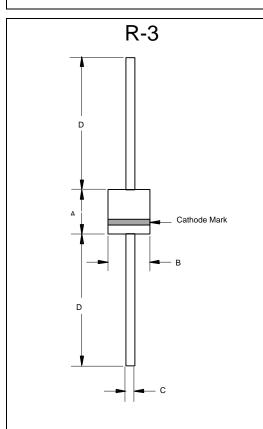
#### Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	I <sub>F(AV)</sub>	2.5 A	T <sub>A</sub> = 75°C
Peak Forward Surge Current	I <sub>FSM</sub>	150A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	$V_{F}$	1.0V	$I_{FM} = 2.5A;$ $T_A = 25^{\circ}C^{*}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I <sub>R</sub>	5.0μA 50μA	T <sub>A</sub> = 25°C T <sub>A</sub> = 100°C
Typical Junction Capacitance	CJ	35pF	Measured at 1.0MHz, V <sub>R</sub> =4.0V

<sup>\*</sup>Pulse Test: Pulse Width 300µsec, Duty Cycle 1%

Notes: 1. High Temperature Solder Exemption Applied, see EU Directive Annex Notes 7.

## 2.5 Amp Silicon Rectifier 50 to 1000 Volts



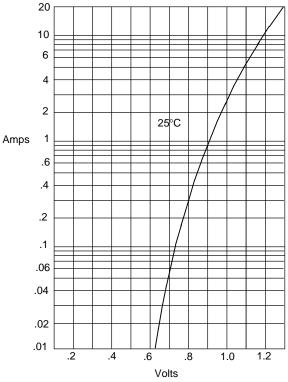
DIMENSIONS							
	INCHES		MM				
DIM	MIN	MAX	MIN	MAX	NOTE		
Α		.160		4.10			
В		.160		4.10			
С	.040	.042	1.01	1.07			
D	1.000		25.40				

### RL251 thru RL257

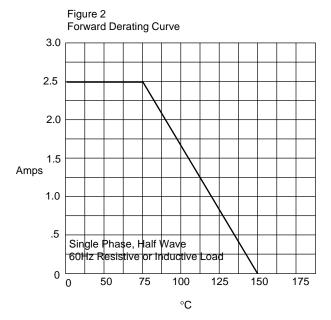
 $\cdot M \cdot C \cdot C \cdot$ 

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Figure 1 Typical Forward Characteristics

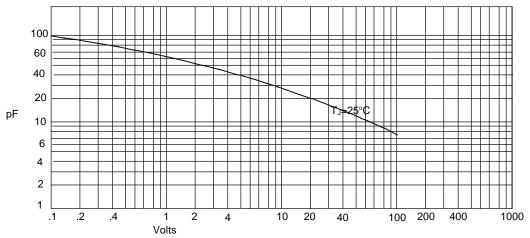


Instantaneous Forward Current - Amperesversus Instantaneous Forward Voltage - Volts



Average Forward Rectified Current - Amperes*versus* Ambient Temperature -°C



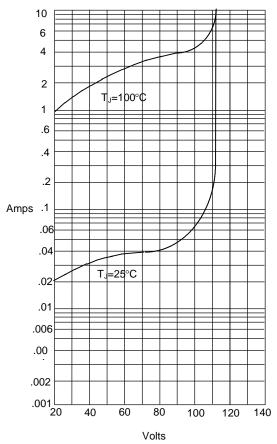


Junction Capacitance - pF*versus* Reverse Voltage - Volts

### RL251 thru RL257

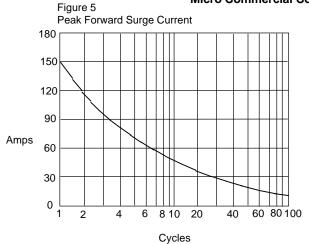


Figure 4
Typical Reverse Characteristics



Instantaneous Reverse Current - Amps*versus* Percent Of Rated Peak Reverse Voltage - Volts

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Peak Forward Surge Current - Amperesversus Number Of Cycles At 60Hz - Cycles



### **Ordering Information:**

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel
Part Number-BP	Bulk: 25Kpcs/Carton

Note: Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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