



Micro Commercial Components 20736 Marilla Street Chatsworth CA 91311

Phone: (818) 701-4933 Fax: (818) 701-4939 **RL101 THRU RL107** 

# **Features**

- Halogen free available upon request by adding suffix "-HF"
- Low Current Leakage
- Metalurgically Bonded Construction
- Low Cost
- 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)

# 1 Amp Rectifier 50 - 1000 Volts

# **Maximum Ratings**

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Maximum Thermal Resistance; 50°C/W Junction To Lead

MCC	Device	Maximum	Maximum	Maximum
Catalog	Marking	Recurrent	RMS	DC
Number		Peak	Voltage	Blocking
		Reverse		Voltage
		Voltage		_
RL101	RL101	50V	35V	50V
RL102	RL102	100V	70V	100V
RL103	RL103	200V	140V	200V
RL104	RL104	400V	280V	400V
RL105	RL105	600V	420V	600V
RL106	RL106	800V	560V	800V
RL107	RL107	1000V	700V	1000V

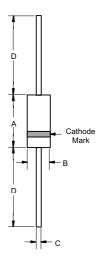
## Electrical Characteristics @ 25°C Unless Otherwise Specified

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Average Forward Current	I <sub>F(AV)</sub>	1.0A	T <sub>A</sub> = 75°C		
Peak Forward Surge Current	I <sub>FSM</sub>	30A	8.3ms, half sine		
Maximum Instantaneous Forward Voltage	V <sub>F</sub>	1.1V	I <sub>FM</sub> = 1.0A; T <sub>J</sub> = 25°C*		
Maximum DC Reverse Current At Rated DC Blocking Voltage	I <sub>R</sub>	5.0μA 50μA	T <sub>J</sub> = 25°C T <sub>J</sub> = 125°C		
Typical Junction Capacitance	С	15pF	Measured at 1.0MHz, V <sub>R</sub> =4.0V		

<sup>\*</sup>Pulse test: Pulse width 300 µsec, Duty cycle 2%

Note: 1. High Temperature Solder Exemptions Applied, see EU Directive Annex 7.

## A-405



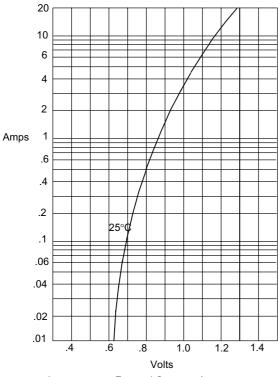
DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
Α	.166	.205	4.10	5.20	
В	.080	.107	2.00	2.70	
С		.024		.60	
D	1.000		25.40		

### RL101 thru RL107

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Volts
Instantaneous Forward Current - Amperesversus
Instantaneous Forward Voltage - Volts

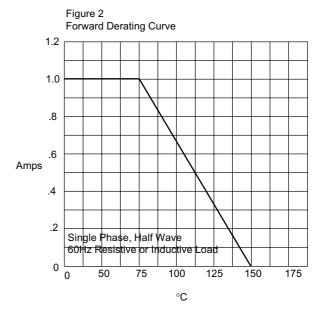
Figure 3

2

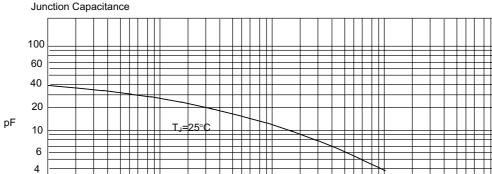
.1

.2

.4



Average Forward Rectified Current - Amperes/ersus Ambient Temperature -°C



Junction Capacitance - pF*versus* Reverse Voltage - Volts

10

20

40

200

100

400

1000

2

Volts

4

### RL101 thru RL107



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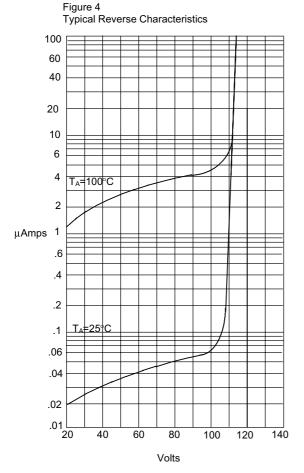


Figure 5
Peak Forward Surge Current

60
40
30
40
10
0
1 2 4 6 8 10 20 40 60 80 100

Cycles

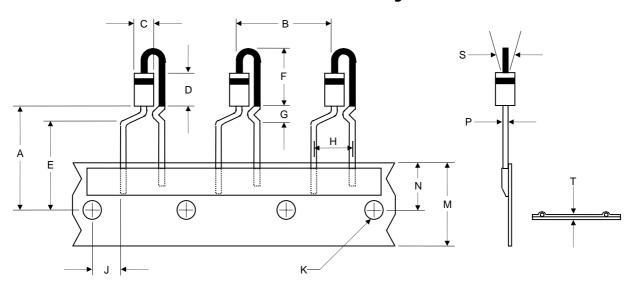
Peak Forward Surge Current - Amperesversus Number Of Cycles At 60Hz - Cycles

Instantaneous Reverse Leakage Current - MicroAmperesersus Percent Of Rated Peak Reverse Voltage - Volts



# RADIAL TAPING SPECIFICATIONS FOR RECTIFIERS

## **A-405 Outline Only**



DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
Α	.709	.748	18.0	20.0	
В	.460	.540	11.7	13.7	
С		.106		2.7	
D		.205		5.2	
Е	.610	.650	15.5	16.5	
F		.354		9.0	
G		.177		4.5	
Н	.177	.217	4.5	5.5	
J	.124	.179	3.15	4.55	
K	.146	.169	3.7	4.3	
М	.677	.748	17.2	19.0	
N	.343	.384	8.70	9.75	
Р	.021	.025	.54	.64	
S		±.079		±2.0	
Т	.016	.031	. 4	.8	

### PACKING METHODS

<u>P/N</u> EXAMPLE: <u>A</u>=N:PANASERT <u>A B C</u>

<u>B</u> = 0: NON INSULATION COATING---LEAD FIRST OUT.

- 1: INSULATION COATING---LEAD FIRST OUT.
- 2: NON INSULATION COATING---BODY FIRST OUT.
- 3: INSULATION COATING---BODY FIRST OUT.
- <u>C</u> = 1: FOR CATHODE DOWN, IN BULK.
  - 2: FOR CATHODE UP, IN BULK.
  - 3: FOR CATHODE DOWN, IN REEL.
  - 4: FOR CATHODE UP, IN REEL



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### **Ordering Information:**

Device	Packing		
Part Number-TP	Tape&Reel: 5Kpcs/Reel		
RL101~RL107-A-B-C-AP(See page 4 for A/B/C suffix details)	Ammo Packing: 2Kpcs/Ammo Box		

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

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