



Micro Commercial Components



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# 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)

## 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 Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking 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

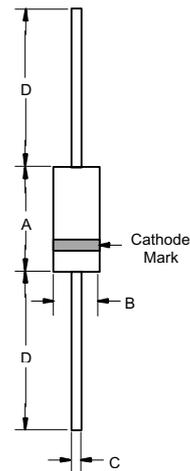
Average Forward Current	$I_{F(AV)}$	1.0A	$T_A = 75^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	30A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	$V_F$	1.1V	$I_{FM} = 1.0\text{A}; T_J = 25^\circ\text{C}^*$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	5.0 $\mu\text{A}$ 50 $\mu\text{A}$	$T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$
Typical Junction Capacitance	$C_J$	15pF	Measured at 1.0MHz, $V_R=4.0\text{V}$

\*Pulse test: Pulse width 300  $\mu\text{sec}$ , Duty cycle 2%

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

## 1 Amp Rectifier 50 - 1000 Volts

### A-405



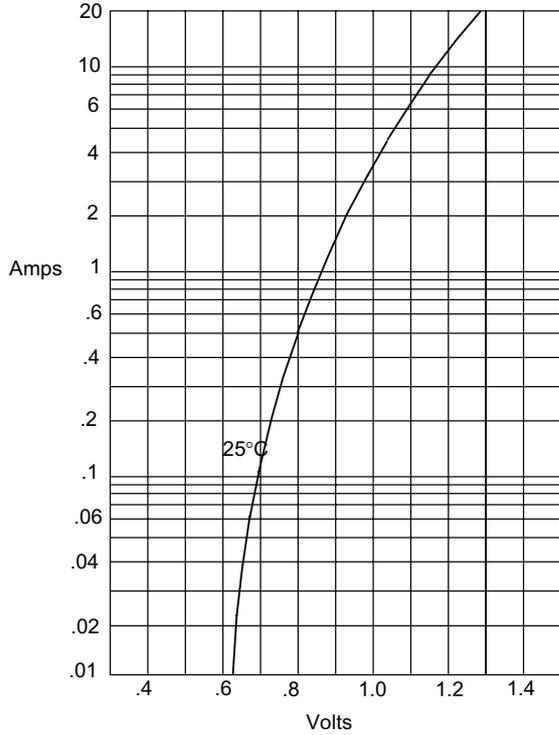
DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	.166	.205	4.10	5.20	
B	.080	.107	2.00	2.70	
C	---	.024	---	.60	
D	1.000	---	25.40	---	

RL101 thru RL107



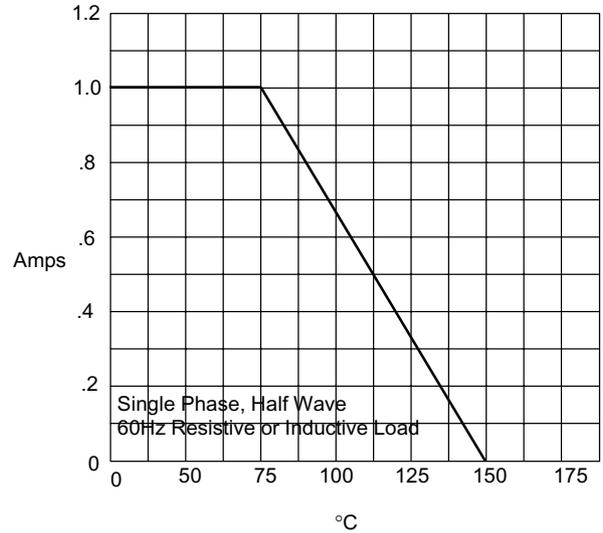
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Figure 1  
Typical Forward Characteristics



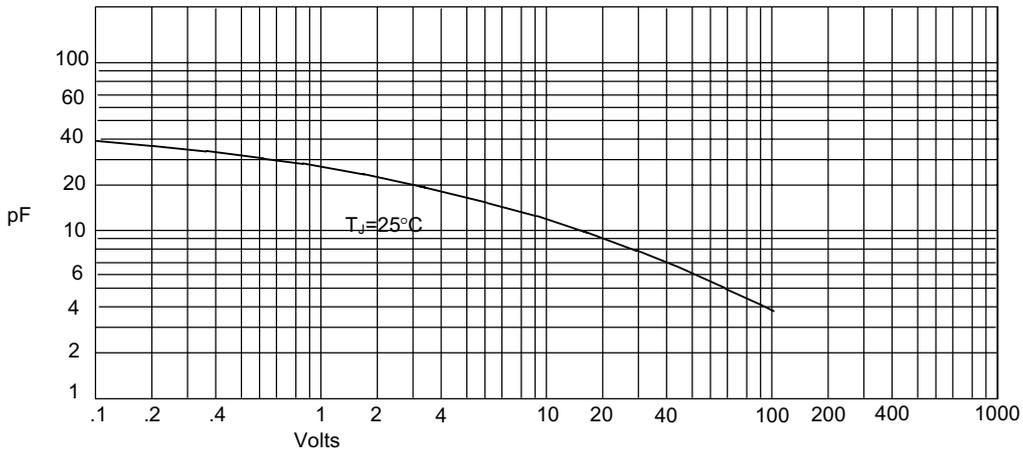
Instantaneous Forward Current - Amperes *versus*  
Instantaneous Forward Voltage - Volts

Figure 2  
Forward Derating Curve



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

Figure 3  
Junction Capacitance

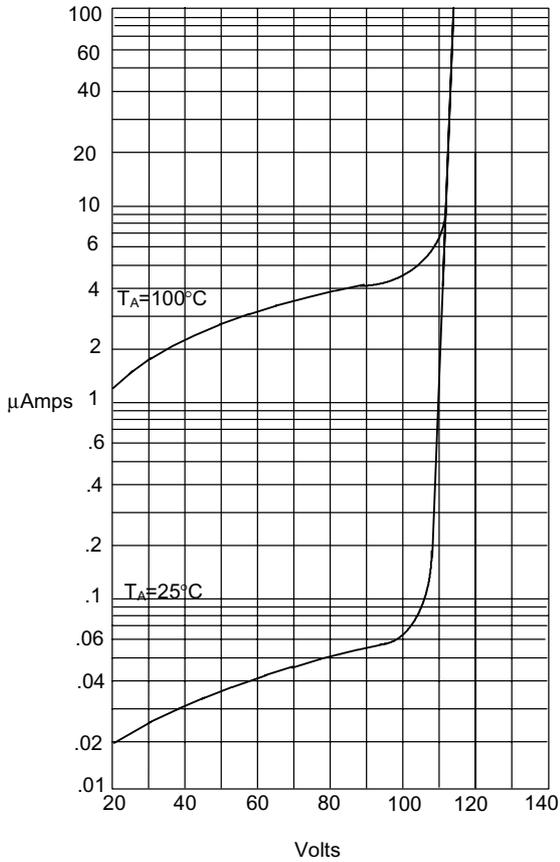


Junction Capacitance - pF *versus*  
Reverse Voltage - Volts

RL101 thru RL107

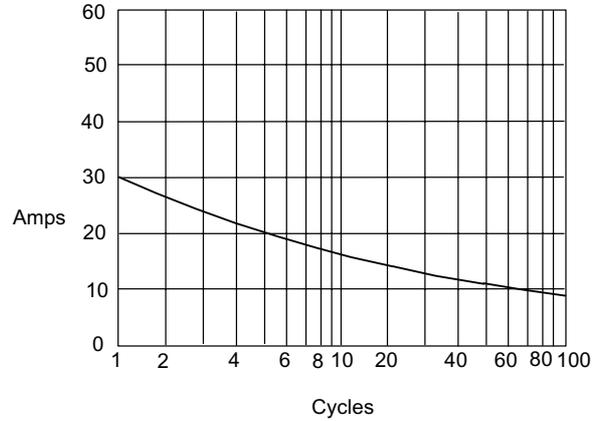


Figure 4  
Typical Reverse Characteristics



Instantaneous Reverse Leakage Current - MicroAmperes versus  
Percent Of Rated Peak Reverse Voltage - Volts

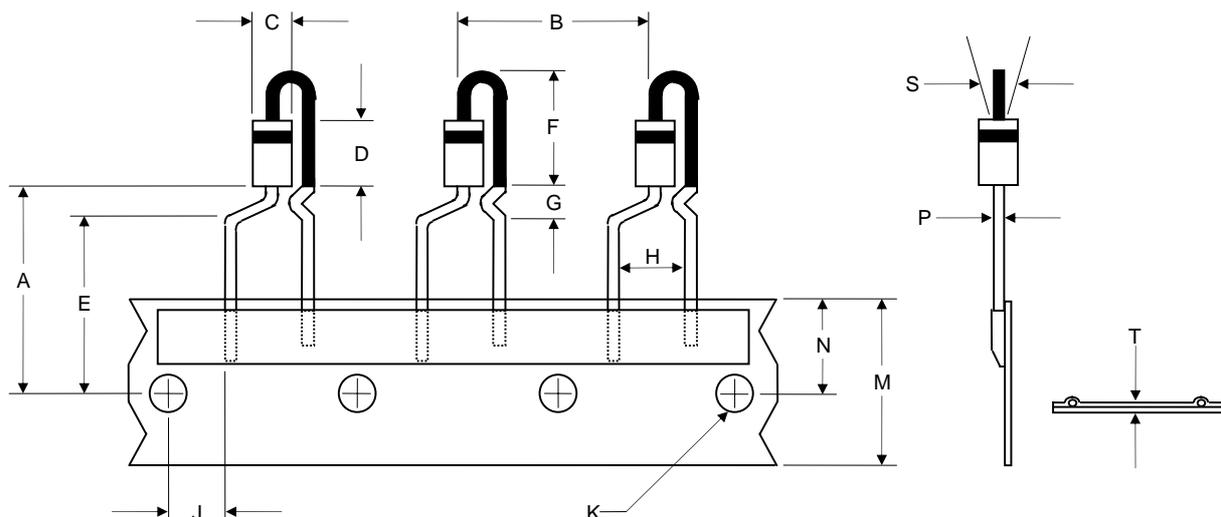
Figure 5  
Peak Forward Surge Current



Peak Forward Surge Current - Amperes versus  
Number Of Cycles At 60Hz - Cycles

# **RADIAL TAPING SPECIFICATIONS** **FOR RECTIFIERS**

## A-405 Outline Only



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.709	.748	18.0	20.0	
B	.460	.540	11.7	13.7	
C	---	.106	---	2.7	
D	---	.205	---	5.2	
E	.610	.650	15.5	16.5	
F	---	.354	---	9.0	
G	---	.177	---	4.5	
H	.177	.217	4.5	5.5	
J	.124	.179	3.15	4.55	
K	.146	.169	3.7	4.3	
M	.677	.748	17.2	19.0	
N	.343	.384	8.70	9.75	
P	.021	.025	.54	.64	
S	---	±.079	---	±2.0	
T	.016	.031	.4	.8	

### PACKING METHODS

P/N EXAMPLE: A=N:PANASERT  
A B C

- B = 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.

- C = 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
RL104-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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