

## Features

- Low Current Leakage
- Metalurgically Bonded Construction
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Lead Free Finish/RoHS Compliant (Note1) ("P" Suffix Designates Compliant. See Ordering Information)

## Maximum Ratings

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

MCC Part 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

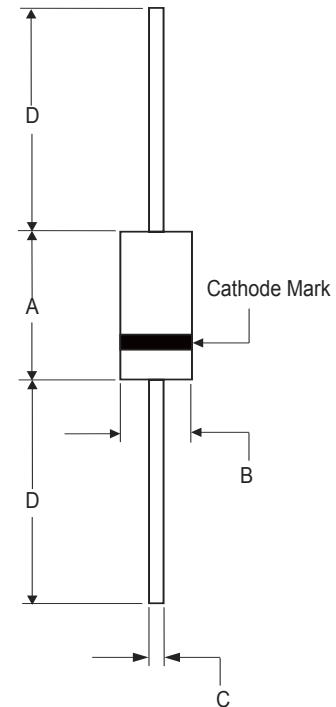
Average Forward Current	$I_{F(AV)}$	1.0A	$T_A = 75^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	30A	8.3ms, Half Sine
Maximum Instantaneous Forward Voltage	$V_F$	1.1V	$I_{FM}=1.0A;$ $T_J=25^\circ\text{C}^*$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	5.0 $\mu\text{A}$ 50 $\mu\text{A}$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

\*Pulse Test: Pulse Width 300  $\mu\text{sec}$ , Duty Cycle 2%

Note: 1.High Temperature Solder Exemption Applied, See EU Directive Annex 7a.

# 1.0 Amp Rectifier 50 to 1000 Volts

## A-405



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.166	0.205	4.10	5.20	
B	0.080	0.107	2.00	2.70	
C	0.021	0.025	0.53	0.64	
D	1.000	-----	25.40	-----	

## Curve Characteristics

Fig. 1 - Forward Current Derating Curve

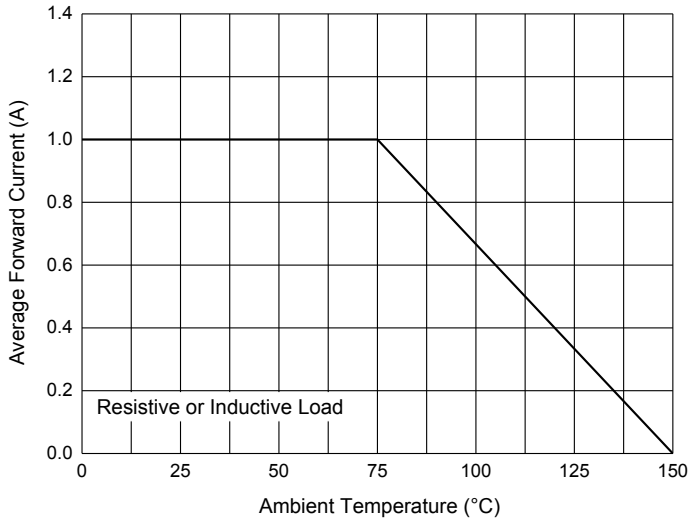


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

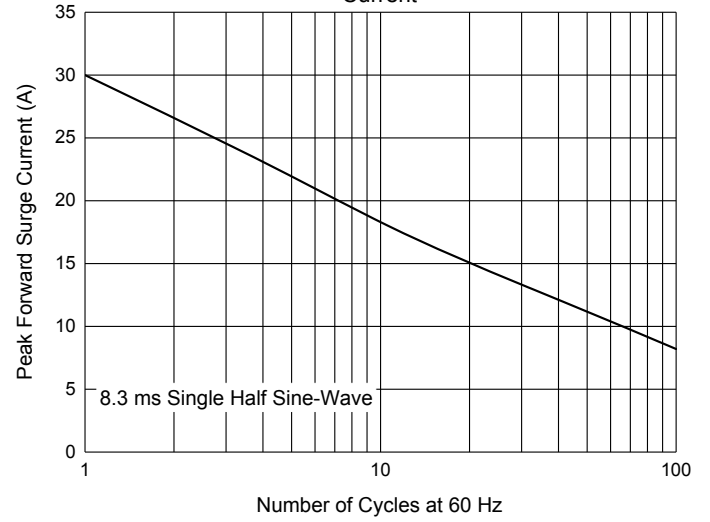


Fig. 3 - Typical Instantaneous Forward Characteristics

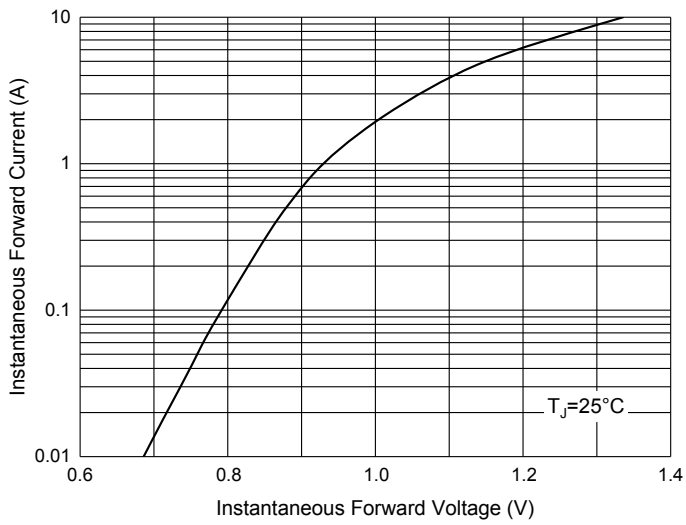
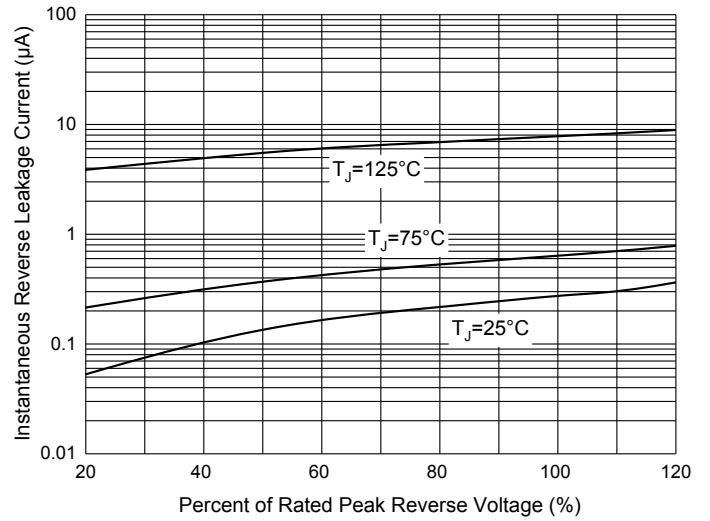
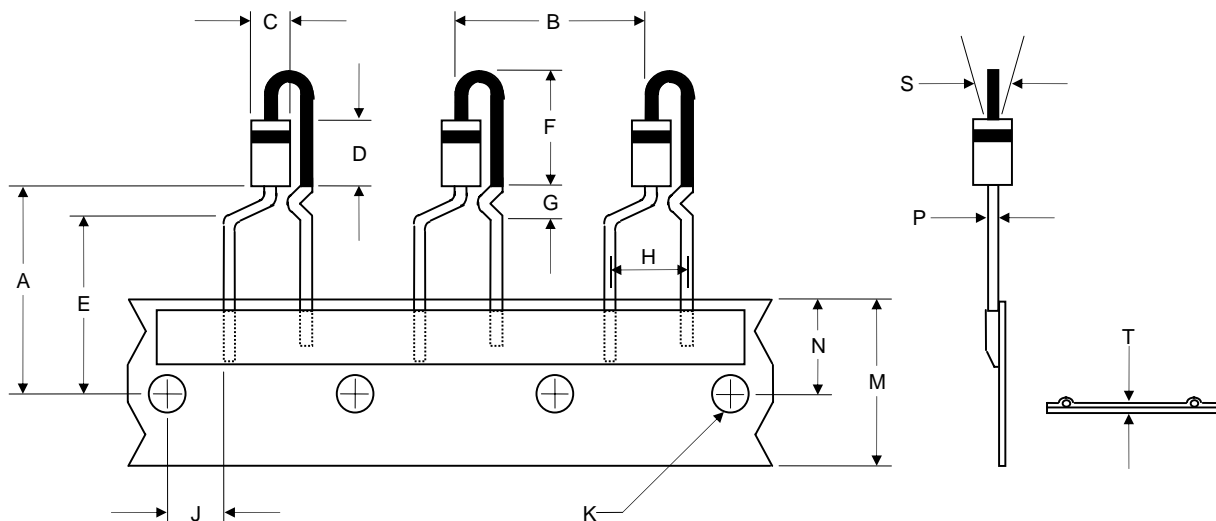


Fig. 4 - Typical Reverse Leakage Characteristics



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

## **A-405 Outline On**



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	.17	.217	4.5	5.5	
J	.12	.179	3.15	4.55	
K	.14	.169	3.7	4.3	
M	.67	.748	17.2	19.0	
N	.34	.384	8.70	9.75	
P	.02	.025	.54	.64	
S	---	±.079	---	±2.0	
T	.01	.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

## Ordering Information

Device	Packing
Part Number-TP	Tape&Reel:5Kpcs/Reel
RL101~RL107-A-B-C-AP(See page 3 for A/B/C suffix details)	Ammo Packing:2Kpcs/Ammo Box

Note : Adding "-HF" Suffix For Halogen Free, eg. Part Number-TP-HF

### \*\*\*IMPORTANT NOTICE\*\*\*

**Micro Commercial Components Corp.** reserves the right to make changes without further notice to any product herein to make corrections, modifications , enhancements , improvements , or other changes . **Micro Commercial Components Corp** . does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights ,nor the rights of others . The user of products in such applications shall assume all risks of such use and will agree to hold **Micro Commercial Components Corp** . and all the companies whose products are represented on our website, harmless against all damages.

### \*\*\*LIFE SUPPORT\*\*\*

MCC's products are not authorized for use as critical components in life support devices or systems without the express written approval of Micro Commercial Components Corporation.

### \*\*\*CUSTOMER AWARENESS\*\*\*

Counterfeiting of semiconductor parts is a growing problem in the industry. Micro Commercial Components (MCC) is taking strong measures to protect ourselves and our customers from the proliferation of counterfeit parts. MCC strongly encourages customers to purchase MCC parts either directly from MCC or from Authorized MCC Distributors who are listed by country on our web page cited below. Products customers buy either from MCC directly or from Authorized MCC Distributors are genuine parts, have full traceability, meet MCC's quality standards for handling and storage. **MCC will not provide any warranty coverage or other assistance for parts bought from Unauthorized Sources.** MCC is committed to combat this global problem and encourage our customers to do their part in stopping this practice by buying direct or from authorized distributors.