

#### **Features**

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

## 1.0 Amp Rectifier 50 to 1000 Volts

#### **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

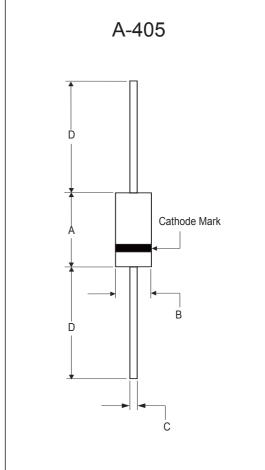
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
RL101	RL101	50V	35V	50V
RL102	RL102	100V	70V	100V
RL103	RL103	200V	140V	200V
RL104	RL104	400V	280V	400V
RL105	RL105	600V	420V	600V
RL106	RL106	800V	560V	800V
RL107	RL107	1000V	700V	1000V

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

Average Forward Current	I <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 I <sub>R</sub> Blocking Voltage		5.0μA 50μA	T <sub>J</sub> =25°C; T <sub>J</sub> =125°C
Typical Junction C <sub>J</sub>		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 Exemption Applied, See EU Directive Annex 7a.



DIMENSIONS					
DIM	INCHES		MM		NOTE
Dilvi	MIN	MAX	MIN MAX	NOTE	
Α	0.166	0.205	4.10	5.20	
В	0.080	0.107	2.00	2.70	
С	0.021	0.025	0.53	0.64	
D	1.000		25.40		



#### **Curve Characteristics**

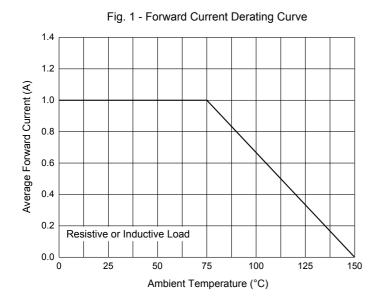


Fig. 3 - Typical Instantaneous Forward Characteristics

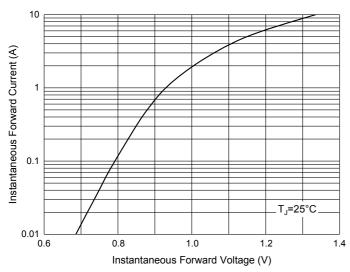
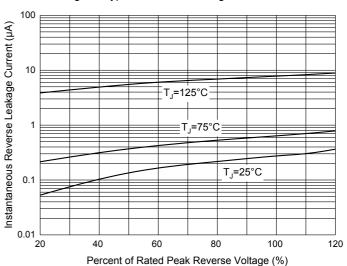


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge
Current

35
30
20
20
15
8.3 ms Single Half Sine-Wave
0
1 10 100
Number of Cycles at 60 Hz

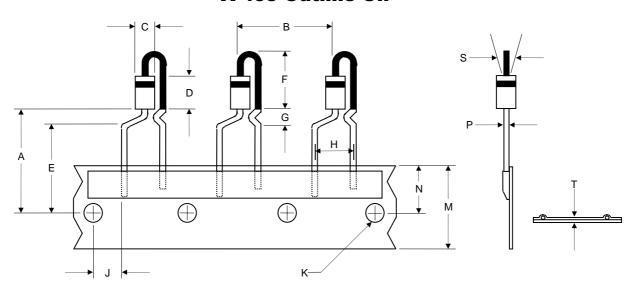
Fig. 4 - Typical Reverse Leakage Characteristics





# RADIAL TAPING SPECIFICATIONS FOR RECTIFIERS

#### A-405 Outline On



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	.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	
Р	.02	.025	.54	.64	
S		±.079		±2.0	
T	.01	.031	. 4	.8	

#### PACKING METHODS

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

- $\underline{B}$  = 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.
- <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



#### **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

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