

Features

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

Maximum Ratings @ 25°C (Unless Otherwise Specified)

Parameter	Symbol	Value							Unit
		RL1 01GP	RL1 02GP	RL1 03GP	RL1 04GP	RL1 05GP	RL1 06GP	RL1 07GP	
Peak Repetitive Reverse Voltage	V_{RRM}								V
Working Peak Reverse Voltage	V_{RWM}	50	100	200	400	600	800	1000	
DC Blocking Voltage	V_R								
RMS Reverse Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Average Rectified Forward Current @ $T_A=75^\circ\text{C}$	$I_{F(AV)}$	1							A
Non-Repetitive Peak Surge Current @ 8.3ms Half Sine Wave	I_{FSM}	30							A
Current Squared Time @ $1\text{ms} \leq t \leq 8.3\text{ms}$	I^2t	3.735							A ² s

Marking code

Part Number	Marking Code
RL101GP	RL101
RL102GP	RL102
RL103GP	RL103
RL104GP	RL104
RL105GP	RL105
RL106GP	RL106
RL107GP	RL107

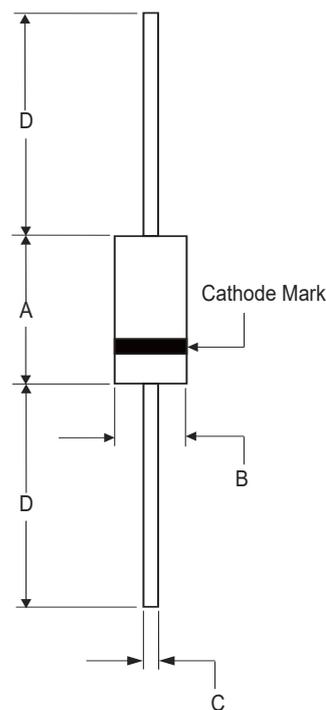
Internal Structure

Pin	Description	Simplified Outline	Graphic Symbol
1	Cathode	<p>XXXXX: Marking Code</p>	
2	Anode		

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

1 Amp General Purpose Rectifier 50 to 1000 Volts

A-405



DIM	INCHES		MM		NOTE
	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	----	

Thermal characteristics

Symbol	Parameter	Conditions	Min	Typ	Max	Unit
T_J	Operating Junction Temperature Range		-55		150	°C
T_{stg}	Storage Temperature Range		-55		150	°C
$R_{th(J-A)}$	Thermal Resistance from Junction to Ambient			50		°C/W

Electrical Characteristics @ 25°C Unless Otherwise Specified

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward Voltage	V_F	$I_F=1A; T_J=25^\circ C$			1.1	V
Reverse Current	I_R	at Rated $V_R; T_J=25^\circ C$ at Rated $V_R; T_J=125^\circ C$			5 50	μA
Junction Capacitance	C_J	$V_R=4V; f=1MHz; T_J=25^\circ C$		6		pF

Curve Characteristics

Fig. 1 - Forward Current Derating Curve

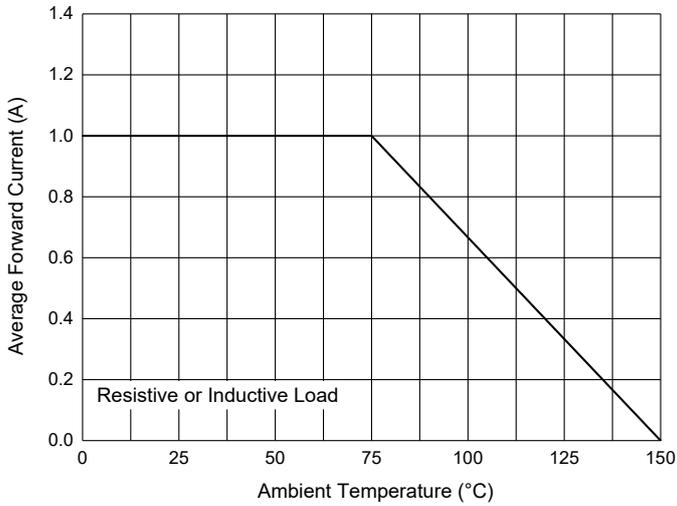


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

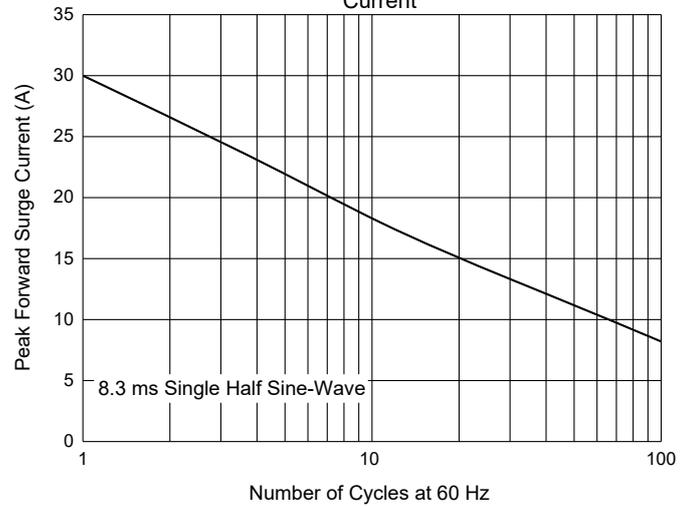


Fig. 3 - Typical Forward Characteristics

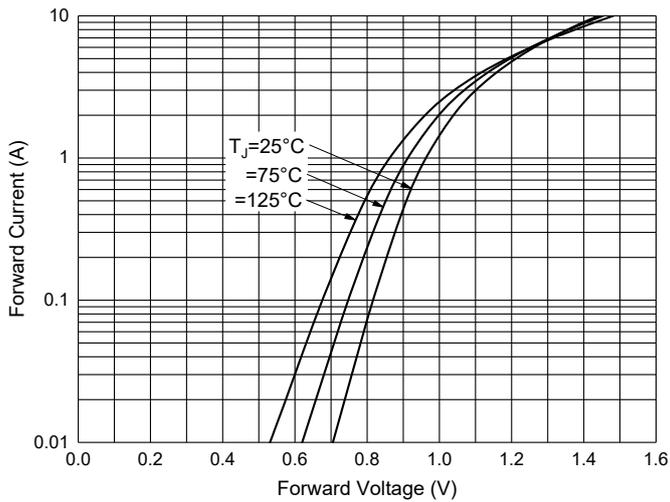


Fig. 4 - Typical Reverse Leakage Characteristics

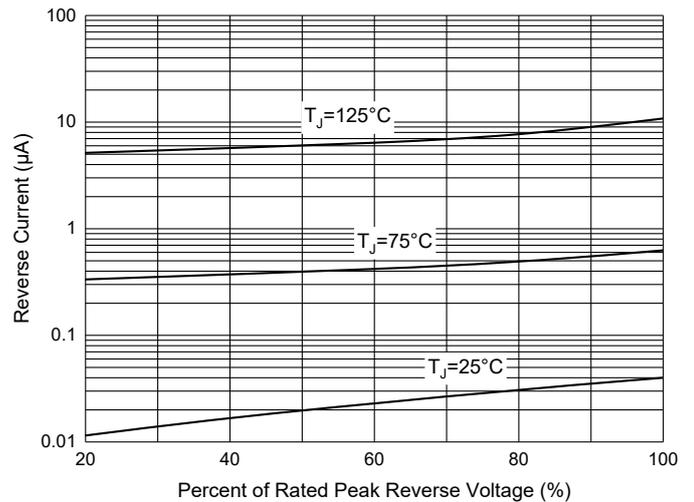
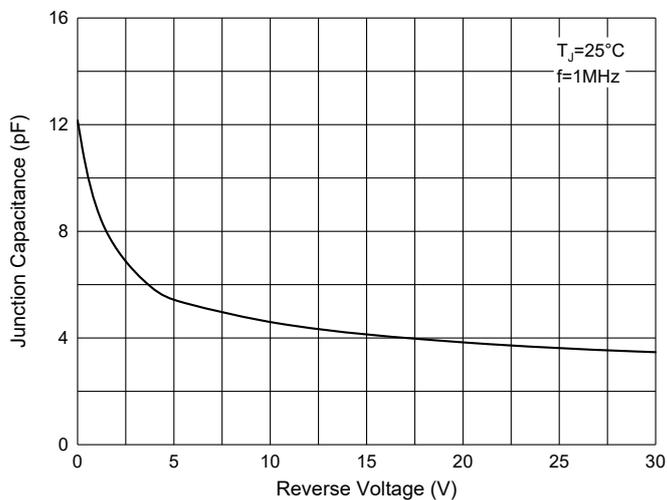


Fig. 5 - Typical Capacitance Characteristics



Ordering Information

Device	Packing
Part Number-TP	Tape&Reel:5Kpcs/Reel

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

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