

# 1N4001GP-1N4007GP

## PLASTIC GLASS PASSIVATED RECTIFIERS

### FEATURES

- Available as "HR" (high reliability) screened per MIL-PRF-19500, JANTX level. Add "HR" suffix to base part number.
- Available as non-RoHS (Sn/Pb plating), standard, and as RoHS by adding "-PBF" suffix.

### MAXIMUM RATINGS

Characteristic	Value	Unit
<b>Maximum recurrent peak reverse voltage</b>		Volts
1N4001GP	50	
1N4002GP	100	
1N4003GP	200	
1N4004GP	400	
1N4005GP	600	
1N4006GP	800	
1N4007GP	1000	
<b>Maximum RMS voltage</b>		Volts
1N4001GP	35	
1N4002GP	70	
1N4003GP	140	
1N4004GP	280	
1N4005GP	420	
1N4006GP	560	
1N4007GP	700	
<b>Maximum DC blocking voltage</b>		Volts
1N4001GP	50	
1N4002GP	100	
1N4003GP	200	
1N4004GP	400	
1N4005GP	600	
1N4006GP	800	
1N4007GP	1000	
<b>Operating &amp; Storage Temperature</b>	-55 to +150	°C
<b>Maximum thermal resistance, junction to lead :</b>	20	°C/W
<b>Maximum thermal resistance, junction to ambient:</b>	100	°C/W

### ELECTRICAL CHARACTERISTICS (T<sub>A</sub> = 25°C unless otherwise specified)

Part number	Average forward current	Peak forward surge current	Maximum instantaneous forward voltage	Maximum DC reverse current at rated DC blocking voltage		Typical junction capacitance
	I <sub>F(AV)</sub>	I <sub>FSM</sub>	V <sub>F</sub>	I <sub>R</sub>		C <sub>J</sub>
	T <sub>A</sub> = 75°C	8.3ms half sine	I <sub>FM</sub> = 1.0A, T <sub>J</sub> = 25°C <sup>(1)</sup>	T <sub>J</sub> = 25°C	T <sub>J</sub> = 125°C	Measured at 1MHz, V <sub>R</sub> = 4.0V
	Amps	Amps	Volts	µA	µA	pF
1N4001GP	1.0	30	1.1	5.0	50	15
1N4002GP	1.0	30	1.1	5.0	50	15
1N4003GP	1.0	30	1.1	5.0	50	15

# 1N4001GP-1N4007GP

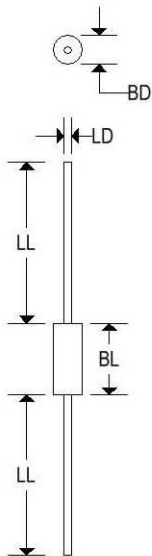
## PLASTIC GLASS PASSIVATED RECTIFIERS

### ELECTRICAL CHARACTERISTICS ( $T_A = 25^\circ\text{C}$ unless otherwise specified)

Part number	Average forward current	Peak forward surge current	Maximum instantaneous forward voltage	Maximum DC reverse current at rated DC blocking voltage		Typical junction capacitance
	$I_{F(AV)}$	$I_{FSM}$	$V_F$	$I_R$		$C_j$
	$T_A = 75^\circ\text{C}$	8.3ms half sine	$I_{FM} = 1.0\text{A}$ , $T_J = 25^\circ\text{C}^{(1)}$	$T_J = 25^\circ\text{C}$	$T_J = 125^\circ\text{C}$	Measured at 1MHz, $V_R = 4.0\text{V}$
	Amps	Amps	Volts	$\mu\text{A}$	$\mu\text{A}$	pF
1N4004GP	1.0	30	1.1	5.0	50	15
1N4005GP	1.0	30	1.1	5.0	50	15
1N4006GP	1.0	30	1.1	5.0	50	15
1N4007GP	1.0	30	1.1	5.0	50	15

### MECHANICAL CHARACTERISTICS

Case:	DO-41 Plastic
Polarity:	Cathode band
Marking:	Alpha numeric



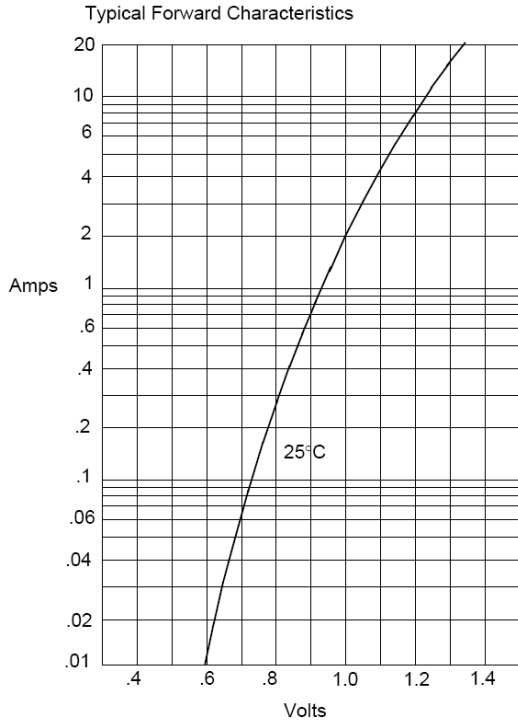
	DO-41			
	Inches		Millimeters	
	Min	Max	Min	Max
BD	-	0.107	-	2.720
BL	-	0.205	-	5.207
LD	0.028	0.034	0.711	0.864
LL	1.000	-	25.400	-



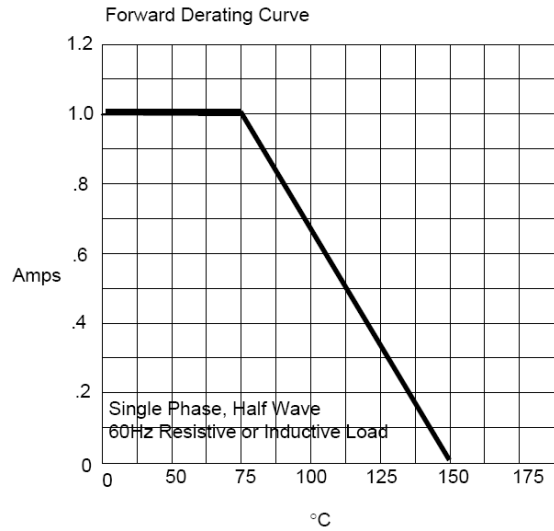
High-reliability discrete products  
and engineering services since 1977

# 1N4001GP-1N4007GP

PLASTIC GLASS PASSIVATED RECTIFIERS

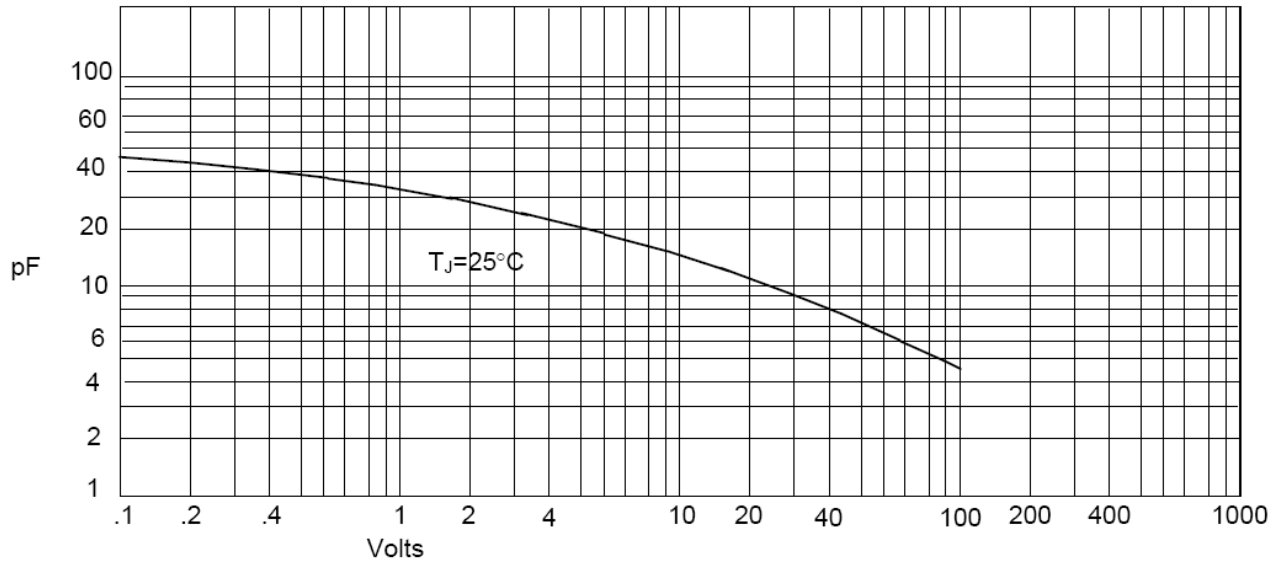


Instantaneous Forward Current - Amperes *versus*  
Instantaneous Forward Voltage - Volts



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

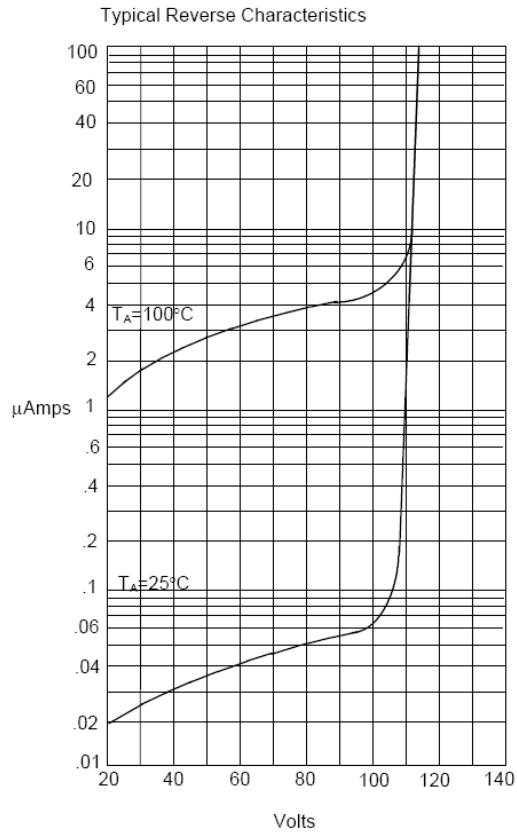
## Junction Capacitance



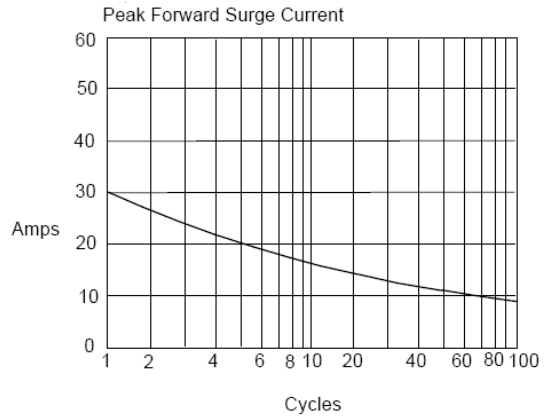
Junction Capacitance - pF *versus*  
Reverse Voltage - Volts

# 1N4001GP-1N4007GP

PLASTIC GLASS PASSIVATED RECTIFIERS



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



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