

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

ELECTRICAL CHARACTERISTICS (T_A = 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 _{F(AV)} | I _{FSM} | V _F | I _R | | C _J |
| | T _A = 75°C | 8.3ms half sine | I _{FM} = 1.0A, T _J = 25°C ⁽¹⁾ | T _J = 25°C | T _J = 125°C | Measured at 1MHz, V _R = 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 |

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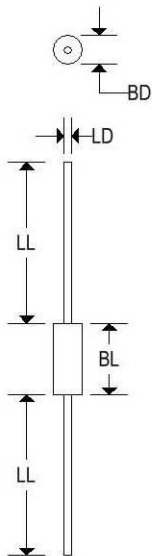
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| | Amps | Amps | Volts | µA | µA | pF |
| 1N4004GP | 1.0 | 30 | 1.1 | 5.0 | 50 | 15 |
| 1N4005GP | 1.0 | 30 | 1.1 | 5.0 | 50 | 15 |
| 1N4006GP | 1.0 | 30 | 1.1 | 5.0 | 50 | 15 |
| 1N4007GP | 1.0 | 30 | 1.1 | 5.0 | 50 | 15 |

MECHANICAL CHARACTERISTICS

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



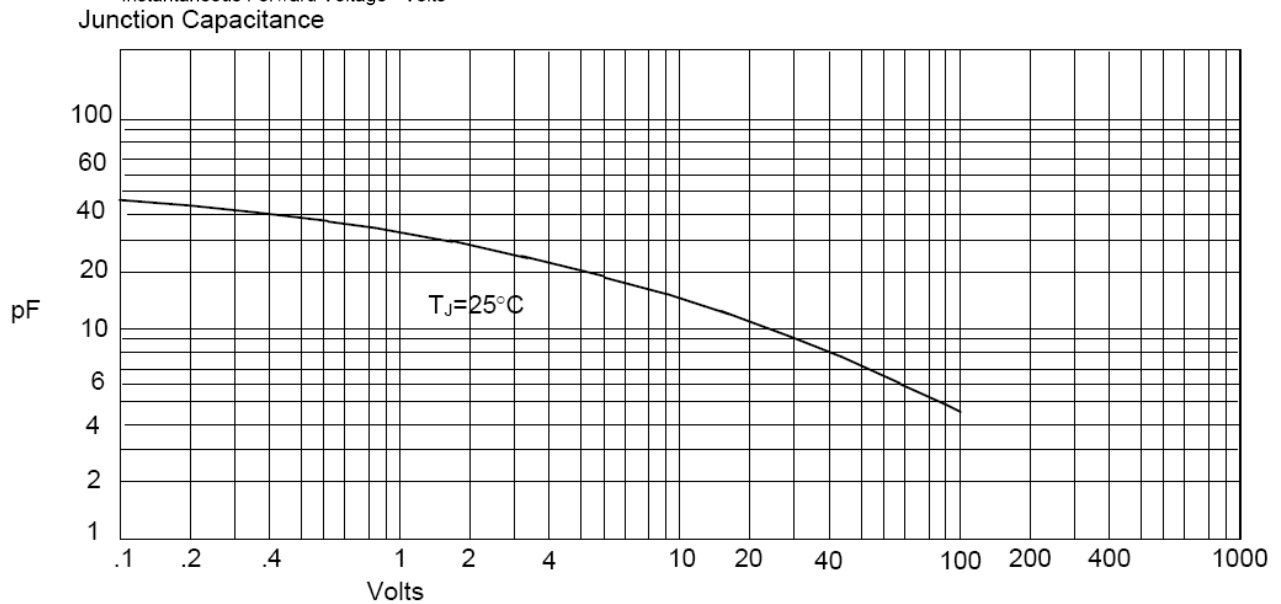
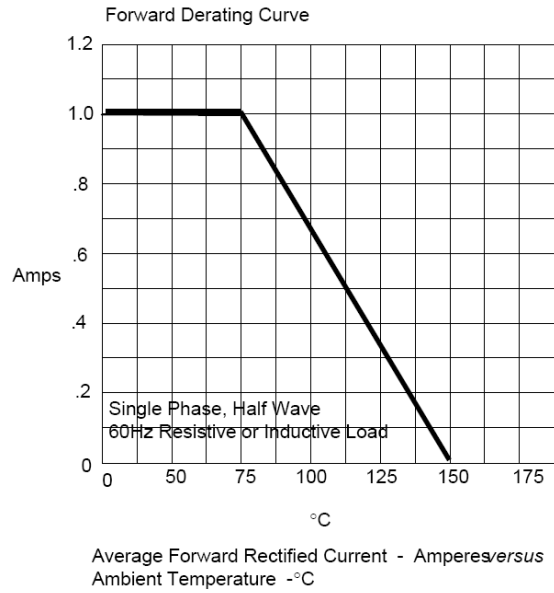
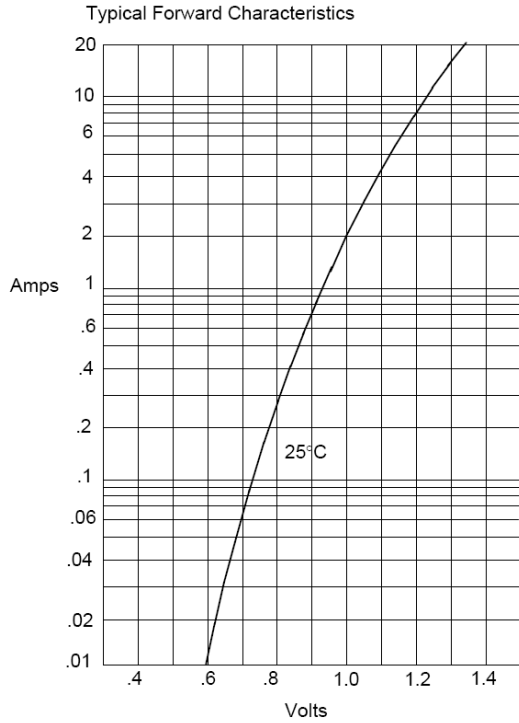
| | DO-41 | | | |
|----|--------|-------|-------------|-------|
| | Inches | | Millimeters | |
| | Min | Max | Min | Max |
| BD | - | 0.107 | - | 2.720 |
| BL | - | 0.205 | - | 5.207 |
| LD | 0.028 | 0.034 | 0.711 | 0.864 |
| LL | 1.000 | - | 25.400 | - |



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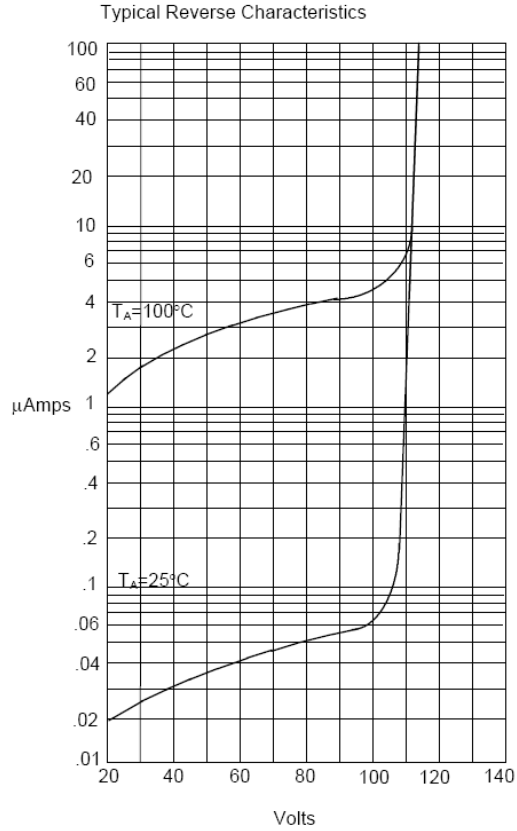
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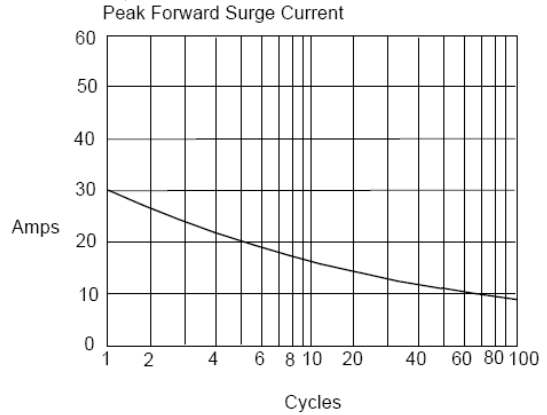


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Instantaneous Reverse Leakage Current - MicroAmperes versus
Percent Of Rated Peak Reverse Voltage - Volts



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