

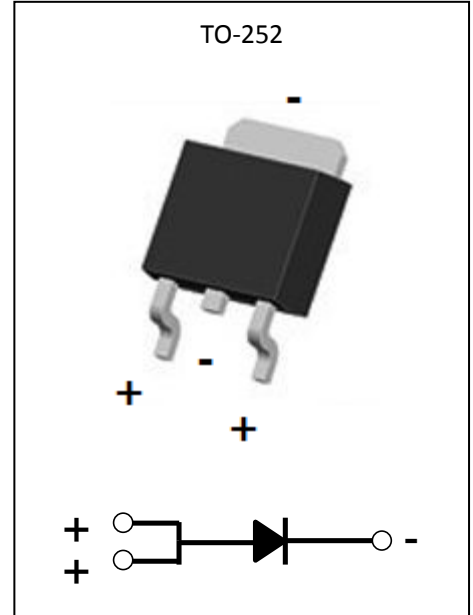
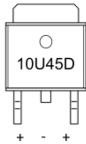


GP10U45D

Feature

- Ultra-Low Forward Voltage
- Low Power Loss, High Efficiency
- High Current Capability
- High Surge Capability
- High Junction Temperature
- Low Reverse Current

MARKING:



ABSOLUTE MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

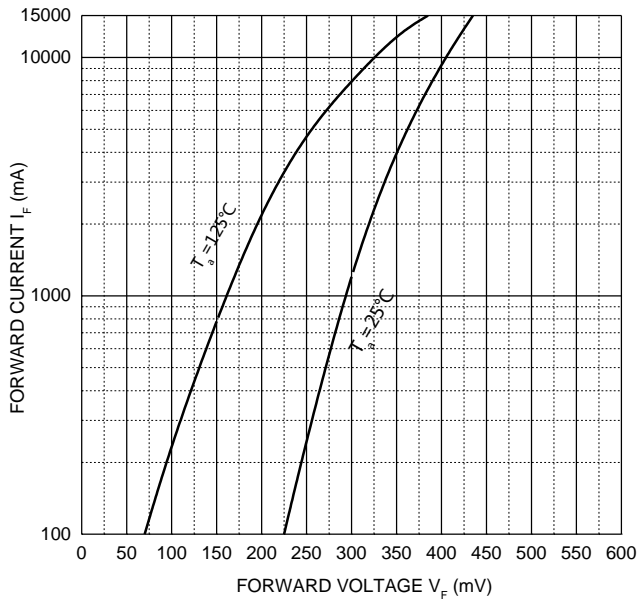
| Parameter | Symbol | Value | Unit |
|---|-----------------|----------|----------------------|
| Peak repetitive reverse voltage | V_{RRM} | 45 | V |
| Working peak reverse voltage | V_{RWM} | | |
| DC blocking voltage | V_R | | |
| RMS reverse voltage | $V_{R(RMS)}$ | 32 | V |
| Average rectified output current@ $T_c=125^{\circ}\text{C}$ | I_o | 10 | A |
| Non-Repetitive peak forward surge current 8.3ms half sine wave | I_{FSM} | 300 | A |
| Power dissipation | P_D | 1.2 | W |
| Thermal resistance from junction to ambient | $R_{\theta JA}$ | 85 | $^{\circ}\text{C/W}$ |
| Junction temperature | T_j | 125 | $^{\circ}\text{C}$ |
| Storage temperature | T_{stg} | -55~+150 | $^{\circ}\text{C}$ |

ELECTRICAL CHARACTERISTICS ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

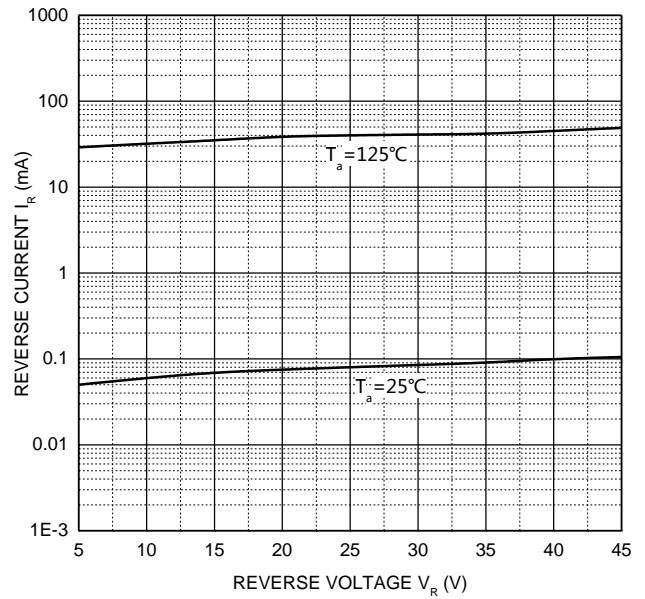
| Parameter | Symbol | Test Condition | Min | Type | Max | Unit |
|---------------------------|------------|---|-----|------|------|---------------|
| Reverse voltage | $V_{(BR)}$ | $I_R=1\text{mA}$ | 45 | | | V |
| Reverse current | I_R | $V_R=45\text{V}, T_a=25^{\circ}\text{C}$ | | 100 | 500 | μA |
| | | $V_R=45\text{V}, T_a=125^{\circ}\text{C}$ | | 50 | | mA |
| Forward voltage | V_F | $I_F=5\text{A}$ | | 0.35 | 0.40 | V |
| | | $I_F=10\text{A}$ | | 0.39 | 0.45 | V |
| Typical total capacitance | C_{tot} | $V_R=4\text{V}, f=1\text{MHz}$ | | 3100 | | pF |

Typical Characteristics

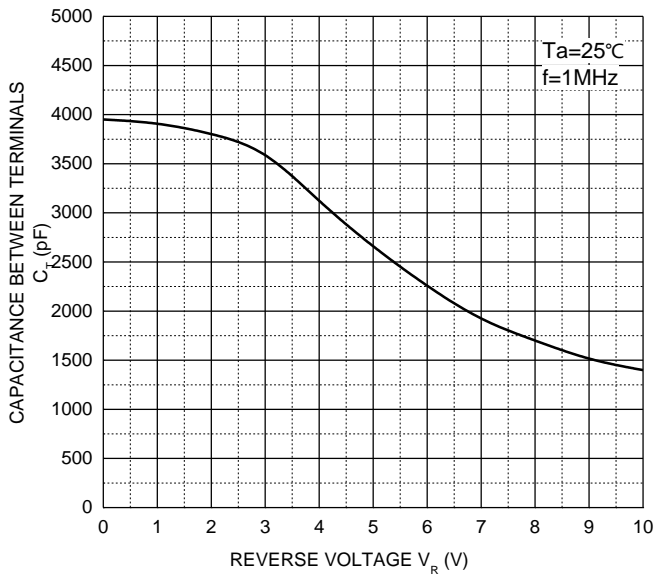
Forward Characteristics



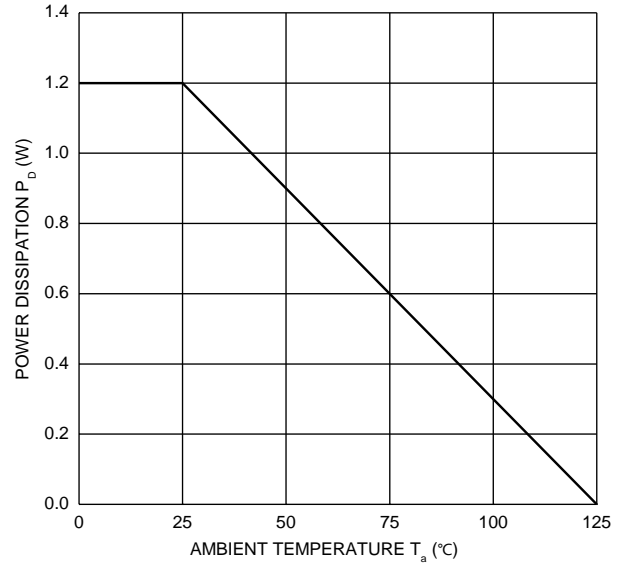
Reverse Characteristics



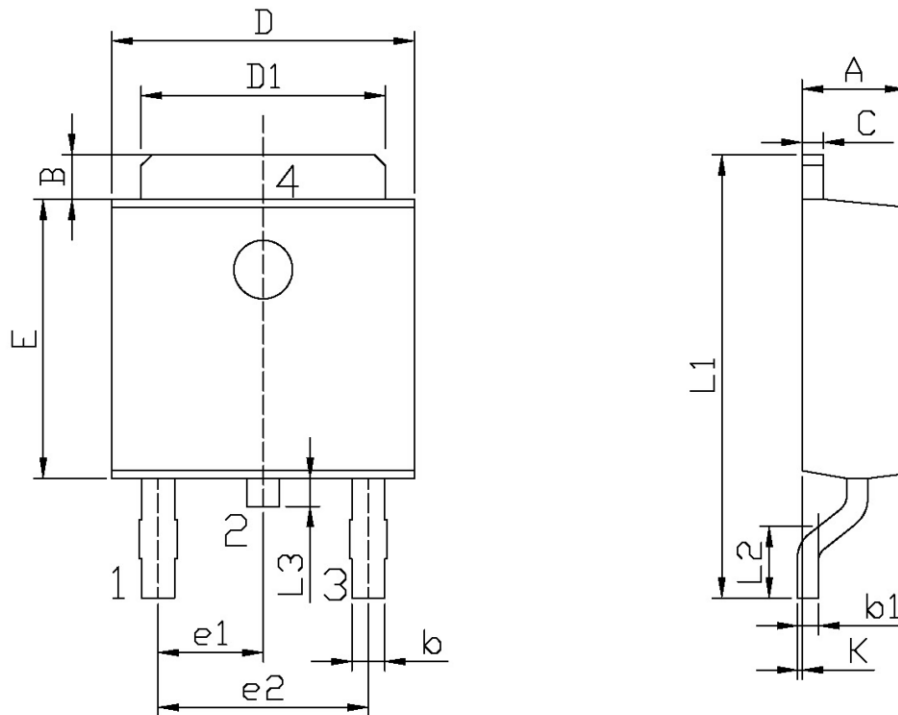
Capacitance Characteristics



Power Derating Curve



TO-252 Package Outline Dimensions



单位: mm

| Symbol | Dimensions In Millimeters | | Symbol | Dimensions In Millimeters | |
|--------|---------------------------|------|--------|---------------------------|------|
| | Min | Max | | Min | Max |
| A | 2.20 | 2.40 | E | 5.95 | 6.25 |
| B | 0.95 | 1.25 | e1 | 2.24 | 2.34 |
| b | 0.50 | 0.70 | e2 | 4.43 | 4.73 |
| b1 | 0.45 | 0.55 | L1 | 9.45 | 9.95 |
| C | 0.45 | 0.55 | L2 | 1.25 | 1.75 |
| D | 6.45 | 6.75 | L3 | 0.60 | 0.90 |
| D1 | 5.10 | 5.50 | K | 0.00 | 0.10 |

| Package Type 封装形式 | Units 包装数量 | | | | | Dimension 包装尺寸 (unit: mm ³) | | |
|----------------------|--------------------|-------------------------|------------------------|------------------------------|------------------------|---|-------------|-------------|
| | Units/Tube 只/套管 | Tubes/Inner Box 套管/盒 | Units/Inner Box 只/盒 | Inner Boxes/Outer Box 盒/箱 | Units/Outer Box 只/箱 | Tube 套管 | Inner Box 盒 | Outer Box 箱 |
| TO-252 | 75 | 48 | 3,600 | 5 | 18,000 | 526x20.5x5.25 | 555x164x50 | 575x290x180 |

单击下面可查看定价，库存，交付和生命周期等信息

[>>GP\(格瑞宝\)](#)