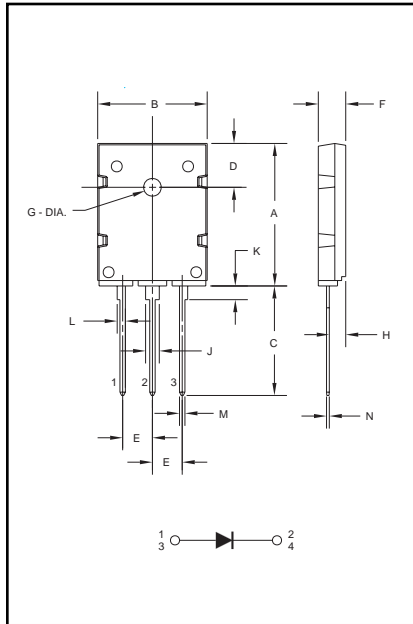
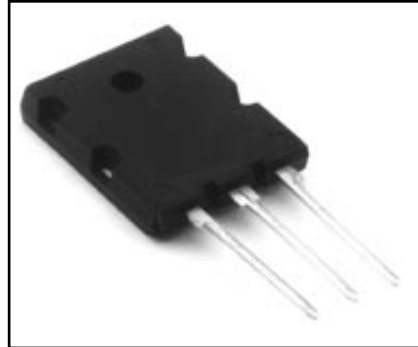


Super Fast Recovery Single Diode 25 Amperes/1200 Volts



Outline Drawing

| Dimension | Inches | Millimeters |
|-----------|-------------------------------|-------------|
| A | 1.02±0.02 | 26.0±0.5 |
| B | 0.81 Max. | 20.5 Max. |
| C | 0.79 Min. | 20.0 Min. |
| D | 0.24±0.008 | 6.0±0.2 |
| E | 0.214±0.012 | 5.45±0.3 |
| F | 0.20±0.012 | 5.0±0.3 |
| G | 0.214±0.012 Dia. Dia. 3.2±0.2 | |
| H | 0.12±0.012 | 3.0±0.3 |
| J | 0.10±0.012 | 2.5±0.3 |
| K | 0.10 | 2.5 |
| L | 0.08±0.012 | 2.0±0.3 |
| M | 0.04±0.008 | 1.0±0.2 |
| N | 0.02±0.008 | 0.6±0.2 |



RM25HG-24S
Super Fast Recovery
Single Diode
25 Amperes/1200 Volts

Description:

Powerex Super Fast Recovery Diodes are designed for use in applications requiring fast switching.

Features:

- Non-Isolated Package
- Planar Chips
- $t_{rr} = 300$ ns Max.

Applications:

- Snubber Circuits
- Switching Power Supplies
- Free Wheeling

Ordering Information:

Select the complete eight digit part number you desire from the table below.

Example: RM25HG-24S is a 1200 Volt, 25 Ampere Super Fast Recovery Single Diode.

| Type | Current Rating Amperes | Voltage Volts (x50) |
|------|---------------------------|------------------------|
| RM | 25 | 24 |

RM25HG-24S
Super Fast Recovery
Single Diode
 25 Amperes/1200 Volts

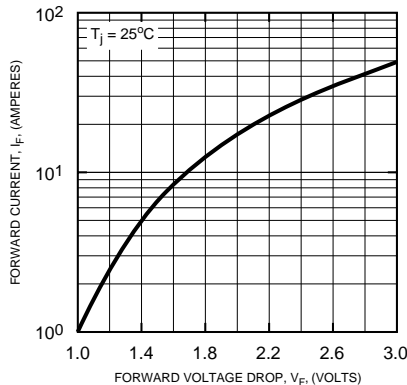
Absolute Maximum Ratings

| Characteristics | Symbol | Conditions | RM25HG-24S | Units |
|--|-------------|------------|------------|--------------------|
| Peak Reverse Blocking Voltage | V_{RRM} | — | 1200 | Volts |
| DC Reverse Blocking Voltage | $V_{R(DC)}$ | — | 960 | Volts |
| DC Current, $T_C = 80^\circ\text{C}$ (Resistive Load) | $I_F(DC)$ | — | 25 | Amperes |
| Peak Half-Cycle Surge (Non-Repetitive) On-State Current (60Hz) | I_{FSM} | — | 500 | Amperes |
| I^2t for Fusing, (8.3 milliseconds) | I^2t | — | — | A ² sec |
| Storage Temperature | T_{STG} | — | -40 to 125 | °C |
| Operating Temperature | T_j | — | -40 to 150 | °C |
| Maximum Mounting Torque M3 Mounting Screw | — | — | 10 | kg.-cm. |
| Weight (Typical) | — | — | 10 | Grams |

Electrical and Thermal Characteristics, $T_j = 25^\circ\text{C}$ unless otherwise specified

| Characteristics | Symbol | Test Conditions | RM25HG-24S | Units |
|---|-------------------|--|------------|---------------|
| Blocking State Maximums | | | | |
| Reverse Leakage Current, Peak | I_{RRM} | $T_j = 125^\circ\text{C}$, $V_{RRM} = \text{Rated}$ | 1 | mA |
| | — | $T_j = 25^\circ\text{C}$, $V_{RRM} = \text{Rated}$ | 0.1 | mA |
| Conducting State Maximums | | | | |
| Peak On-State Voltage | V_{FM} | $T_j = 25^\circ\text{C}$, $I_{FM} = 100\text{A}$ | 4.0 | Volts |
| Switching Minimums | | | | |
| Reverse Recovery Time | t_{rr} | $T_j = 25^\circ\text{C}$, $I_{FM} = 100\text{A}$ | 0.3 | μs |
| Reverse Recovery Charge | Q_{rr} | $di/dt = -500\text{A}/\mu\text{s}$, $V_R = 600\text{V}$ | — | μC |
| Lead Strength | — | Tension Load: 2.5 kg. | 30 | s |
| | — | Bending Load: 1 kg. Bent to 90° | 2 | Times |
| Thermal Maximums | | | | |
| Thermal Resistance, Junction-to-Case | $R_{\theta(J-C)}$ | Diode | 0.5 | °C/Watt |
| Contact Thermal Resistance, Case-to-Fin | $R_{\theta(C-S)}$ | Case to Fin, Thermal Grease Applied | 0.5 | °C/Watt |

FORWARD CHARACTERISTICS (TYPICAL)



REVERSE RECOVERY CHARACTERISTICS (TYPICAL)

