

GR2A thru GR2M

Fast Recovery Surface Mount Rectifiers Reverse Voltage 50 to 1000 Volts Forward Current 2.0 Amperes

Features

- Glass passivated junction chip
- For surface mounted application
- Low forward voltage drop
- ◆ Low profile package
- Built-in strain relief, ideal for automated placement
- Fast switching for high efficiency
- ◆ High temperature soldering: 260°C/10 seconds at terminals
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0



Package: DO-214AA (SMB)

Mechanical Data

Case: Molded plasticTerminals: Solder plated

Polarity: Indicated by cathode endWeight: 0.003 ounce, 0.093 gram



Electrical Characteristics (T_A=25°C unless otherwise noted)

| Parameter | | Symbols | GR2A | GR2B | GR2D | GR2G | GR2J | GR2K | GR2M | Units |
|--|-------------------------|--------------------|-------------|------|------|------|------|------|------|-------|
| Maximum Repetitive Peak Reverse Voltage | | V _{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | Volts |
| Maximum RMS Voltage | | V _{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | Volts |
| Maximum DC Blocking Voltage | | V _{DC} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | Volts |
| Maximum Average Forward Rectified Current T _L =100°C | | I _{F(AV)} | 2.0 | | | | | | | Amps |
| Peak Forward Surge Current (8.3ms single half sine-wave superimposed on rated load) (JEDEC Method) | | I _{FSM} | 50.0 | | | | | | | Amps |
| Maximum Instantaneous Forward Voltage at 2A | | V _F | 1.35 | | | | | | | Volts |
| Maximum DC Reverse Current | @ T _A =25°C | | 5.0 | | | | | | | uA |
| at Rated DC Blocking Voltage | @ T _A =125°C | l _R | 200 | | | | | | | |
| Typical Reverse Recovery Time at I_F =0.5A, I_R =1.0A, I_{RR} =0.25A | | T _{RR} | 150 | | | 250 | 500 | | nS | |
| Typical Junction Capacitance at 4.0V, 1MHz | | C, | 50 | | | | | | | pF |
| Typical Thermal Resistance(Note 1) | | R _{THJA} | 55 | | | | | | | °C/W |
| | | R _{THJL} | 18 | | | | | | | -C/W |
| Operating Junction Temperature Range | | TJ | -55 to +150 | | | | | | | °C |
| Storage Temperature Range | | T _{STG} | -55 to +150 | | | | | | | °C |

Notes: 1. Thermal resistance form junction to ambient and from junction to lead frame P.C.B. mounted on 0.3×0.3"(8.0×8.0mm) copper pad areas.

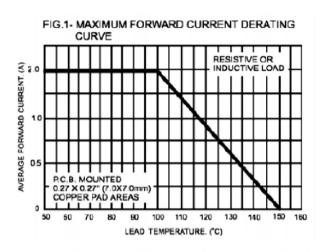


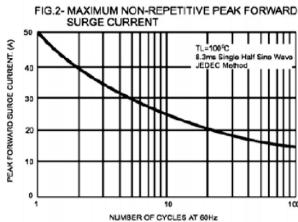
GR2A thru GR2M

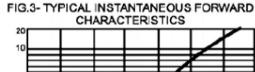
Fast Recovery Surface Mount Rectifiers

Reverse Voltage 50 to 1000 Volts Forward Current 2.0 Amperes

Typical Electrical Characteristic Curves







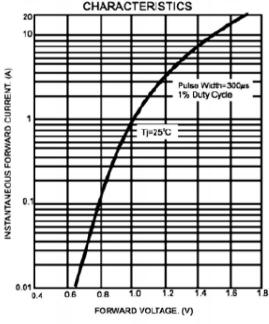


FIG.4- TYPICAL REVERSE CHARACTERISTICS

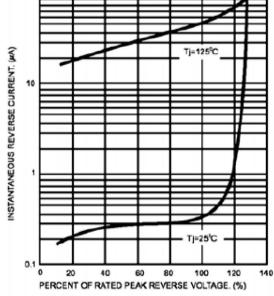
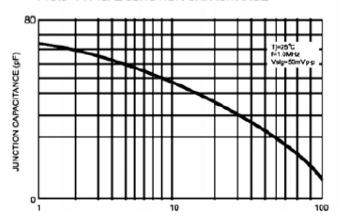


FIG.5- TYPICAL JUNCTION CAPACITANCE





GR2A thru GR2M

Fast Recovery Surface Mount Rectifiers Reverse Voltage 50 to 1000 Volts Forward Current 2.0 Amperes

Package Outline Dimensions

DO-214AA (SMB)

Dimensions in inches and (millimeters)

