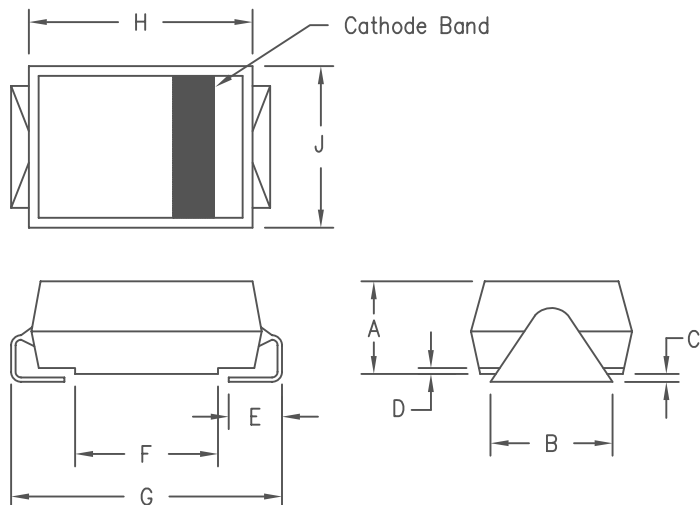


1 Amp Standard Recovery Rectifier GS1A — GS1M



| Dim. | Inches | | Millimeter | | Notes |
|------|---------|---------|------------|---------|-------|
| | Minimum | Maximum | Minimum | Maximum | |
| A | .078 | .115 | 1.98 | 2.95 | |
| B | .067 | .089 | 1.70 | 2.25 | |
| C | .002 | .008 | 0.05 | 0.20 | |
| D | --- | 0.02 | --- | 0.51 | |
| E | .035 | .055 | 0.89 | 1.40 | |
| F | .065 | .096 | 1.65 | 2.45 | |
| G | .205 | .224 | 5.21 | 5.69 | |
| H | .160 | .180 | 4.06 | 4.57 | |
| J | .100 | .112 | 2.57 | 2.84 | |

DO-214AC
(SMAJ) (High Profile)

| Microsemi Catalog Number | Working Peak Reverse Voltage | Repetitive Peak Reverse Voltage |
|--------------------------|------------------------------|---------------------------------|
| GS1A | 50V | 50V |
| GS1B | 100V | 100V |
| GS1D | 200V | 200V |
| GS1G | 400V | 400V |
| GS1J | 600V | 600V |
| GS1K | 800V | 800V |
| GS1M | 1000V | 1000V |

- 150°C Junction Temperature
- Low thermal resistance

Electrical Characteristics

| | | |
|------------------------------|--------------------|--|
| Average forward current | $I_{F(AV)}$ 1 Amp | $T_L = 75^\circ\text{C}, V_R = V_{RRM}$ |
| Maximum surge current | I_{FSM} 30 Amps | 8.3ms, half sine |
| Max peak forward voltage | V_{FM} 1.1 Volts | $I_{FM} = 1\text{A}; T_J = 25^\circ\text{C}^*$ |
| Max peak reverse voltage | V_{RRM} 10 uA | $V_{RRM}, T_J = 25^\circ\text{C}$ |
| Max peak reverse current | I_{RM} 50 uA | $V_{RRM}, T_J = 125^\circ\text{C}^*$ |
| Typical junction capacitance | C_J 25 pF | $V_R = 5.0\text{V}, T_J = 25^\circ\text{C}$ |

*Pulse test: Pulse width 300 usec, Duty cycle 2%

Thermal and Mechanical Characteristics

| | | |
|---|-----------------|----------------|
| Storage temperature range | T_{STG} | -55°C to 150°C |
| Operating temperature range | T_J | -55°C to 150°C |
| Max thermal resistance – Junction to Lead | $R_{\theta JL}$ | 15°C/W |



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05-01-07 Rev. 2

GS1A — GS1M

Figure 1
Typical Forward Characteristics

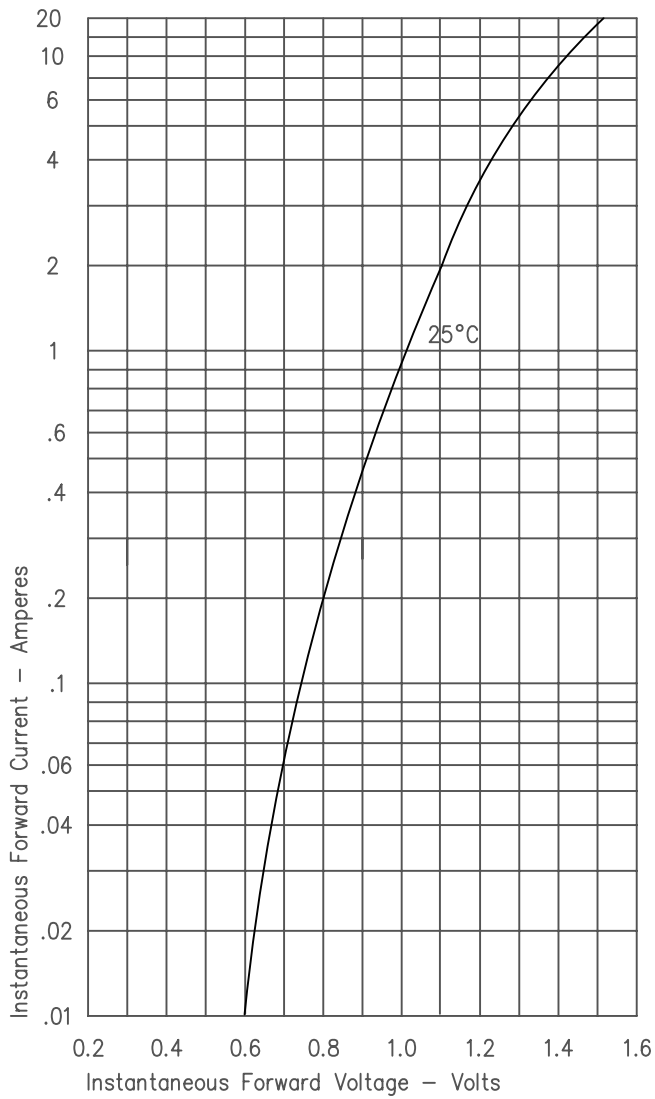


Figure 2
Typical Junction Capacitance

