

Main Product Characteristics

| | |
|-------------|-------|
| $I_{F(AV)}$ | 2x5A |
| V_{RRM} | 60V |
| T_J | 150°C |
| $V_{(TYP)}$ | 0.49V |

Features

- Axial lead type devices for through hole design.
- Low forward voltage drop.
- Excellent high temperature stability.
- Fast switching capability.
- Suffix "G" indicates Halogen-free part, ex. CSRL1060G-A.
- Lead-free parts meet environmental standards of MIL-STD-19500 /228

Mechanical data

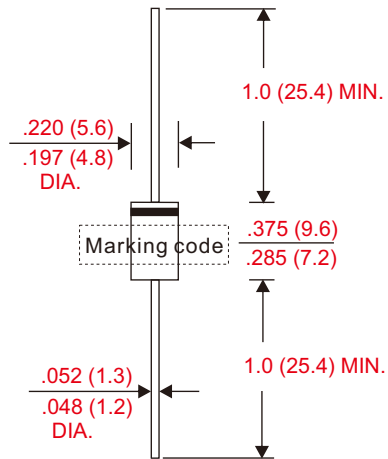
- Epoxy:UL94-V0 rated flame retardant
- Case : Molded plastic, DO-201AD / DO-27
- Lead : Axial leads, solderable per MIL-STD-202, Method 208 guranteed
- Polarity : Color band denotes cathode end
- Weight : Approximated 1.10 gram

Maximum ratings and electrical characteristics

Rating at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Outline

DO-27(DO-201AD)



Dimensions in inches and (millimeters)

| Parameter | Conditions | Symbol | CSRL1060-A | UNIT |
|---------------------------------------|--|-----------------|------------|------|
| Marking code | | | CSRL1060 | |
| Peak repetitive reverse voltage | | V_{RRM} | 60 | V |
| Working peak reverse voltage | | V_{RWM} | | |
| DC blocking voltage | | V_{RM} | | |
| Forward rectified current | | I_O | 10 | A |
| Forward surge current | 8.3ms single half sine-wave superimposed on rate load (JEDEC method) | I_{FSM} | 180 | A |
| Peak repetitive reverse surge current | 2us - 1kHz | I_{RRM} | 3 | A |
| Thermal resistance | Junction to case | $R_{\theta JC}$ | 18 | °C/W |
| Operating and Storage temperature | | T_J, T_{STG} | -55 ~ +150 | °C |

| Parameter | Conditions | Symbol | MIN. | TYP. | MAX. | UNIT |
|----------------------|------------------------------------|--------|------|------|------|------|
| Forward voltage drop | $I_F = 10A, T_J = 25^\circ C$ | V_F | | | 650 | mV |
| | $I_F = 10A, T_J = 125^\circ C$ | | | 490 | 560 | |
| | $I_F = 20A, T_J = 25^\circ C$ | | | | 790 | |
| Reverse current | $V_R = V_{RRM}, T_J = 25^\circ C$ | I_R | | | 0.5 | mA |
| | $V_R = V_{RRM}, T_J = 125^\circ C$ | | | | 100 | |

Rating and characteristic curves

Fig. 1 - Instantaneous Forward Characteristics

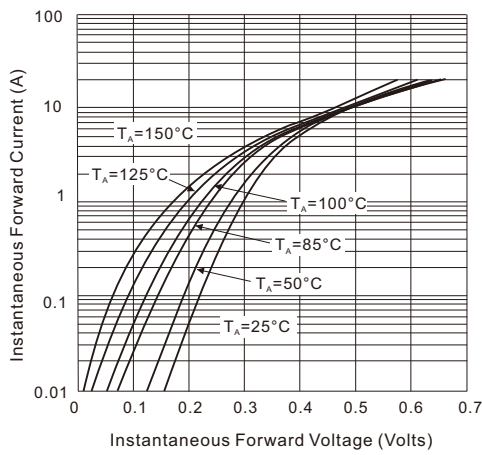


Fig. 2 - Reverse Characteristics

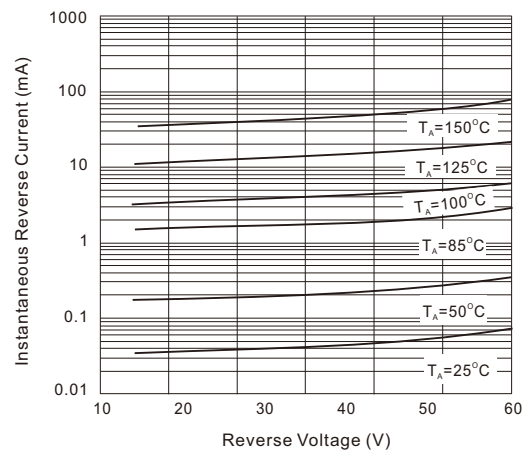
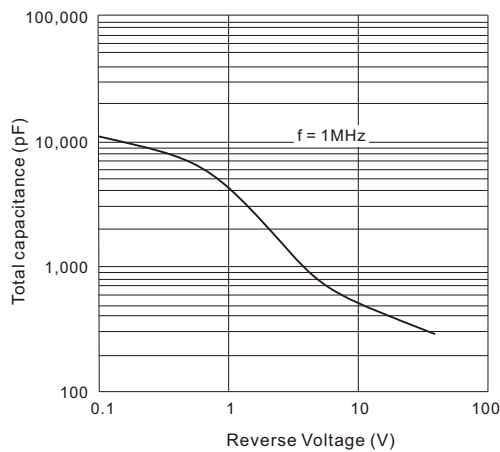


Fig. 3 - Total Capacitance VS. Reverse Voltage



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