



**REVERSE VOLTAGE: 50 - 1000 V**

**CURRENT: 0.5A**

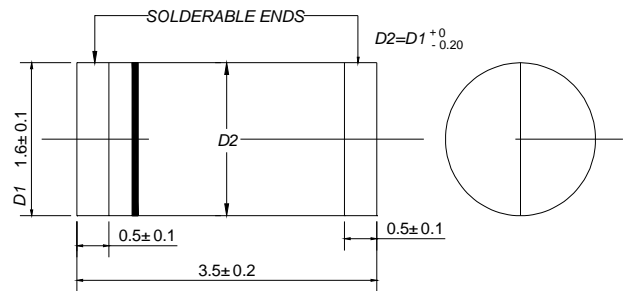
**DO - 213AA**

## Features

- ◇ Plastic package has underwriters laboratory flammability classifications
- ◇ For surface mounted applications
- ◇ Low profile package
- ◇ Built-in strain relief, ideal for automated placement
- ◇ Glass passivated chip junction
- ◇ High temperature soldering: 250°C/10 seconds at terminals

## Mechanical Data

- ◇ Case: JEDEC DO-213AA, molded plastic over passivated chip
- ◇ Polarity: Color band denotes cathode end
- ◇ Weight: 0.0014 ounces, 0.036 gram



Dimensions in millimeters

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified

|   |                 | GL34A        | GL34B | GL34D  | GL34G  | GL34J | GL34K | GL34M  | UNITS              |
|---|-----------------|--------------|-------|--------|--------|-------|-------|--------|--------------------|
| Polarity color bands (2nd Band)   |                 | Gray         | Red   | Orange | Yellow | Green | Blue  | Violet |                    |
| Maximum recurrent peak reverse voltage  | $V_{RRM}$       | 50           | 100   | 200    | 400    | 600   | 800   | 1000   | V                  |
| Maximum RMS voltage   | $V_{RWS}$       | 35           | 70    | 140    | 280    | 420   | 560   | 700    | V                  |
| Maximum DC blocking voltage   | $V_{DC}$        | 50           | 100   | 200    | 400    | 600   | 800   | 1000   | V                  |
| Maximum average forward rectified current<br>@ $T_A=75^\circ\text{C}$   | $I_{F(AV)}$     | 0.5          |       |        |        |       |       |        | A                  |
| Peak forward surge current<br>8.3ms single half-sine-wave superimposed<br>on rated load (JEDEC Method)        | $I_{FSM}$       | 10.0         |       |        |        |       |       |        | A                  |
| Maximum instantaneous forward voltage at 0.5 A  | $V_F$           | 1.2          |       |        |        | 1.3   |       |        | V                  |
| Maximum DC reverse current @ $T_A=25^\circ\text{C}$<br>at rated DC blocking voltage @ $T_A=125^\circ\text{C}$ | $I_R$           | 5.0          |       |        |        | 50.0  |       |        | $\mu\text{A}$      |
| Typical junction capacitance (NOTE 2)   | $C_J$           | 4.0          |       |        |        |       |       |        | pF                 |
| Typical reverse recovery time (NOTE 3)  | $t_{rr}$        | 1.5          |       |        |        |       |       |        | $\mu\text{s}$      |
| Typical thermal resistance (NOTE 4)   | $R_{\theta JA}$ | 150          |       |        |        |       |       |        | $^\circ\text{C/W}$ |
| Operating junction temperature range  | $T_J$           | -55-----+150 |       |        |        |       |       |        | $^\circ\text{C}$   |
| Storage temperature range   | $T_{STG}$       | -55-----+150 |       |        |        |       |       |        | $^\circ\text{C}$   |

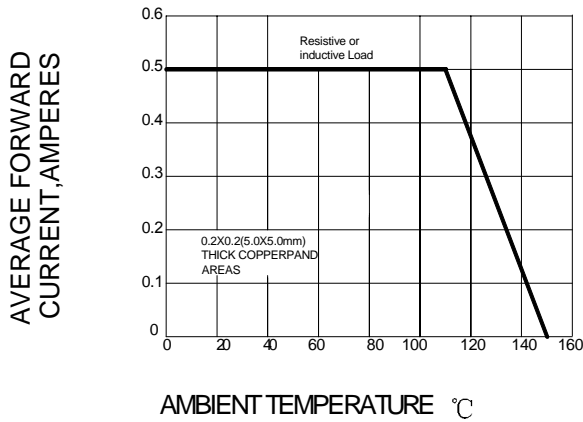
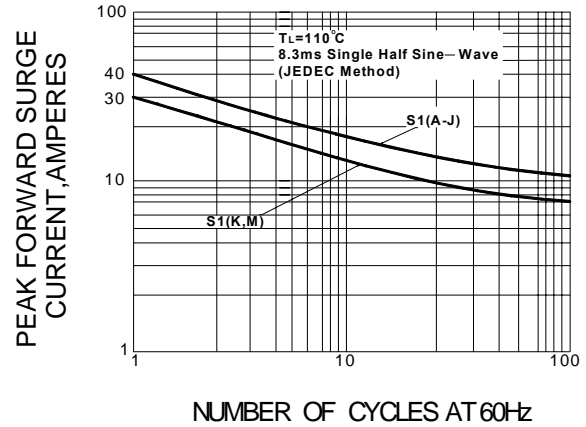
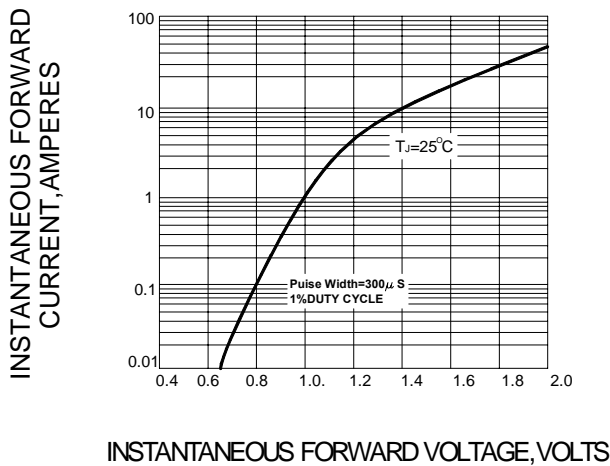
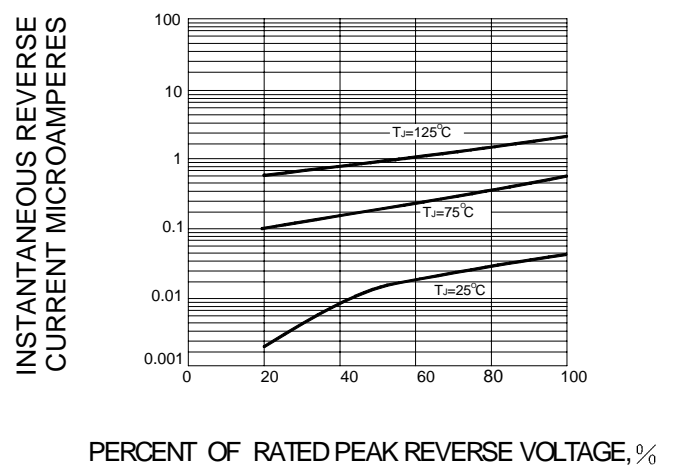
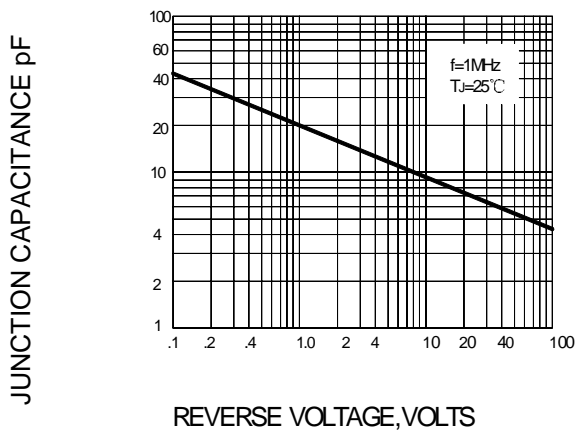
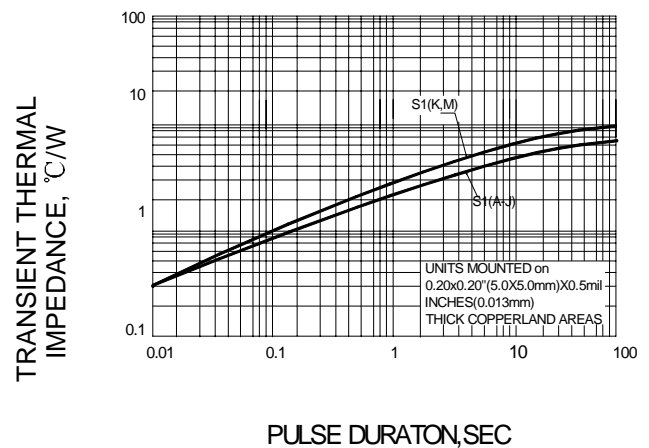
NOTE: 1. Measured at 1.0MHz and applied reverse voltage of 4.0volts

2. Thermal resistance from junction to ambient and junction to lead P.C.B mounted on 0.27"X0.27"(7.0X7.0mm<sup>2</sup>) copper pad areas

3. Measured with  $I_F=0.5\text{A}$ ,  $I_R=1.0\text{A}$ ,  $I_{rr}=0.25\text{A}$ .

4. Thermal resistance from junction to ambient and junction to lead P.C.B. mounted on 0.27"X0.27"(7.0X7.0mm<sup>2</sup>) copper pad areas

## Ratings AND Characteristic Curves

**FIG.1 – FORWARD DERATING CURVE**

**FIG.2 PEAK FORWARD SURGE CURRENT**

**FIG.3 – TYPICAL FORWARD CHARACTERISTICS**

**FIG.4 – TYPICAL REVERSE CHARACTERISTICS**

**FIG.5-TYPICAL JUNCTION CAPACITANCE**

**FIG.6-TRANSIENT THERMAL IMPEDANCE**


| PACKAGE  | SPQ/PCS   | CARTON SPQ/PCS | CARTON SIZE/CM | CARTON GW/KG | CARTON NW/KG |
|----------|-----------|----------------|----------------|--------------|--------------|
| DO-213AA | 5000/REEL | 80000          | 36.0X35.8X36.5 | 18.00        | 16.00        |