

### Features

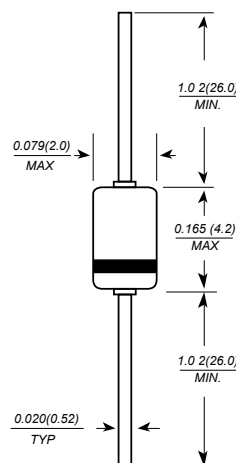
- Fast switching for high efficiency
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed  
250°C/10 seconds, 0.375 (9.5mm) lead length,  
5 lbs. (2.3kg) tension

### Mechanical Data

- Case: DO-35, glass case
- Polarity: Color band denotes cathode
- Weight: 0.004 ounces, 0.13 grams



### DO-35(GLASS)



Dimensions in millimeters

### Maximum Ratings and Electrical Characteristics @ T<sub>A</sub> = 25°C unless otherwise specified

| Parameters                                                         | SYMBOLS                           | Value       |       |  | UNITS |
|--------------------------------------------------------------------|-----------------------------------|-------------|-------|--|-------|
|                                                                    |                                   | 1N60        | 1N60P |  |       |
| Repetitive peak reverse voltage                                    | V <sub>RRM</sub>                  | 40          | 45    |  | V     |
| Forward continuous current T <sub>A</sub> =25°C                    | I <sub>F</sub>                    | 30          | 50    |  | mA    |
| Peak forward surge current(t=1s)                                   | I <sub>FSM</sub>                  | 150         | 500   |  | mA    |
| Storage and junction temperature range                             | T <sub>J</sub> , T <sub>STG</sub> | -65 to +125 |       |  | °C    |
| Maximum lead temperature for soldering during 10s at 4mm from case | T <sub>L</sub>                    | 230         |       |  | °C    |

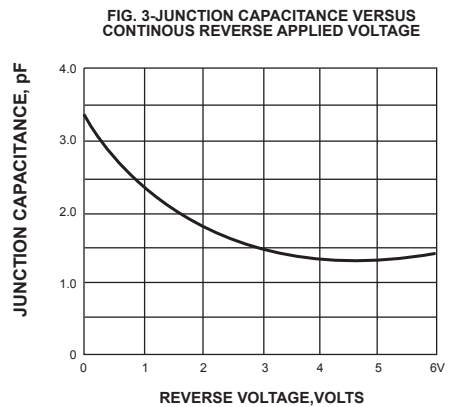
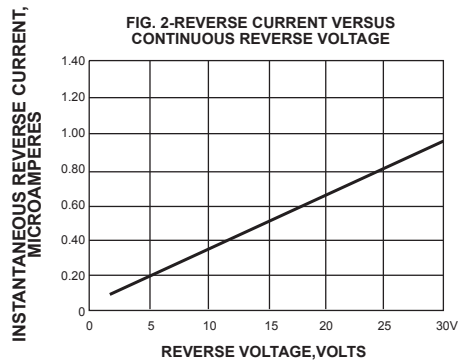
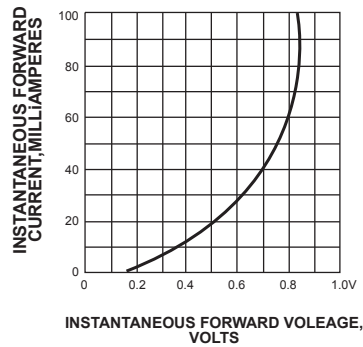
  

| Parameters                              | SYMBOLS         | Test conditions                                                                |       | Value |      |      | UNITS |
|-----------------------------------------|-----------------|--------------------------------------------------------------------------------|-------|-------|------|------|-------|
|                                         |                 |                                                                                |       | Min.  | Typ. | Max. |       |
| Forward voltage                         | V <sub>F</sub>  | I <sub>F</sub> =1mA                                                            | 1N60  |       | 0.32 | 0.5  | V     |
|                                         |                 |                                                                                | 1N60P |       | 0.24 | 0.5  |       |
|                                         |                 | I <sub>F</sub> =30mA                                                           | 1N60  |       | 0.65 | 1.0  |       |
|                                         |                 |                                                                                | 1N60P |       | 0.65 | 1.0  |       |
| Reverse current                         | I <sub>R</sub>  | V <sub>R</sub> =15V                                                            | 1N60  |       | 0.1  | 0.5  | μA    |
|                                         |                 |                                                                                | 1N60P |       | 0.5  | 1.0  |       |
| Junction capacitance                    | C <sub>J</sub>  | V <sub>R</sub> =1V f=1MHz                                                      | 1N60  |       | 2.0  |      | pF    |
|                                         |                 | V <sub>R</sub> =10V f=1MHz                                                     | 1N60P |       | 6.0  |      |       |
| Detection efficiency                    | η               | V <sub>F</sub> =3V f=30MHz C <sub>L</sub> =10pF R <sub>L</sub> =3.8KΩ          |       |       | 60   |      | %     |
| Reverse recovery time                   | t <sub>rr</sub> | I <sub>F</sub> =I <sub>R</sub> =10mA I <sub>rr</sub> =1mA R <sub>C</sub> =100Ω |       |       |      | 1    | ns    |
| Thermal resistance, junction to ambient | RθJA            |                                                                                |       |       | 400  |      | °C/W  |



## 1N60

FIG. 1-FORWARD CURRENT VERSUS FORWARD VOLTAGE (TYPICAL VALUES)



## 1N60P

FIG. 1-FORWARD CURRENT VERSUS FORWARD VOLTAGE (TYPICAL VALUES)

