

**Gold Bonded****1N276****Germanium Diodes***Optimized for Radio Frequency Response*

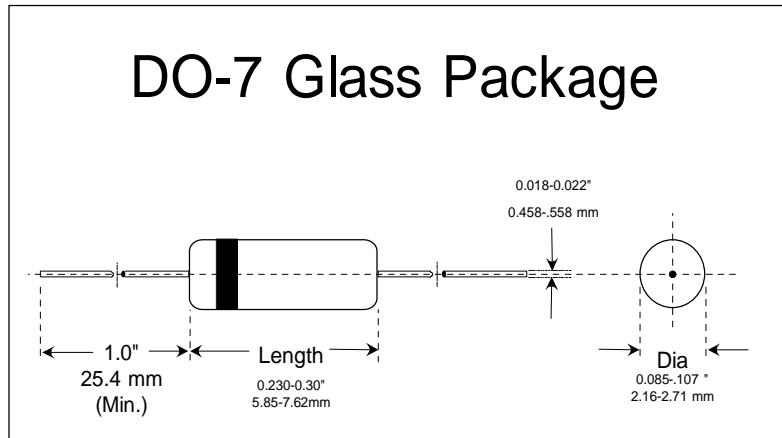
Can be used in many AM, FM and TV-IF applications, replacing point contact devices.

## Applications

- AM/FM detectors
- Ratio detectors
- FM discriminators
- TV audio detectors
- RF input probes
- TV video detectors

## Features

- Lower leakage current
- Flat junction capacitance
- High mechanical strength
- At least 1 million hours MTBF
- BKC's Sigma-Bond™ plating for problem free solderability

**Absolute Maximum Ratings** at  $T_{amb} = 25\text{ }^{\circ}\text{C}$  Unless Otherwise Specified

| Parameter                          | Symbols      | Min. | Max. | Units              |
|------------------------------------|--------------|------|------|--------------------|
| Peak Inverse Voltage               | PIV          | **   | 70   | Volts              |
| Surge Current, t = 1 Second        | $I_S$        |      | 0.4  | Amps               |
| Peak Operating Current             | $I_{FSR}$    |      | 270  | mA                 |
| Operating and Storage Temperatures | $T_{J\&STG}$ | -60  | +90  | $^{\circ}\text{C}$ |

**Electrical Characteristics** at  $T_{amb} = 25\text{ }^{\circ}\text{C}$ 

| Parameter                | Test Conditions   | Symbols         | Min. | Typ. | Max. | Units         |
|--------------------------|---|-----------------|------|------|------|---------------|
| Forward Voltage Drop     | $I_F = 40\text{ mA}$  | $V_F$           |      | **   | 1.0  | Volts         |
| Breakdown Voltage        | $I_R = 1.0\text{ mA}$   | PIV             |      | **   | 75   | Volts         |
| Reverse Leakage          | $V_R = 10\text{ Volts}$   | $I_R$           |      | **   | 5.0  | $\mu\text{A}$ |
| Reverse Leakage          | $V_R = 10\text{ Volts}, T_{amb} = 75\text{ }^{\circ}\text{C}$                             | $I_R$           |      | **   | 100  | $\mu\text{A}$ |
| Junction Capacitance     | $f = 1\text{ MHz}, V_R = 0\text{ volt}$   | $C_J$           |      | 0.8  |      | pF            |
| Reverse Recovery Time    | $t_{rr} (I_f = 5\text{ mA}, I_{rr}(\text{rec.}) @ 0.5\text{ mA}, V_r = -40\text{ Volts})$ | t <sub>rr</sub> | --   | ***  | 300  | nSec          |
| Forward Recovery Voltage | $I_f = 50\text{ mA}$ Peak Sine wave 100 KHz   | V <sub>fr</sub> | --   | ***  | 3.0  | Volts         |



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