

## Schottky Barrier Diodes for General Purpose Applications

### Technical Data

1N5711  
 1N5712  
 5082-2300 Series  
 5082-2800 Series  
 5082-2900

#### Features

- **Low Turn-On Voltage**  
 As Low as 0.34 V at 1 mA
- **Pico Second Switching Speed**
- **High Breakdown Voltage**  
 Up to 70 V
- **Matched Characteristics Available**

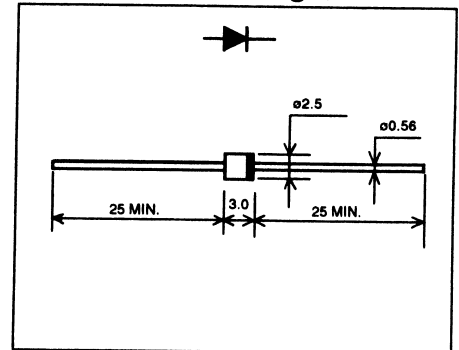
#### Description/Applications

The 1N5711, 1N5712, 5082-2800/10/11 are passivated Schottky barrier diodes which use a patented "guard ring" design to achieve a high breakdown voltage. Packaged in a low cost package, they are well suited for high level detecting, mixing, switching, gating, log or A-D converting, video detecting, frequency discriminating, sampling, and wave shaping.

The 5082-2835 is a passivated Schottky diode in a low cost package. It is optimized for low turn-on voltage. The 5082-2835 is particularly well suited for the UHF mixing needs of the CATV marketplace.

The 5082-2300 Series and 5082-2900 devices are unpassivated Schottky diode package. These diodes have extremely low 1/f noise and are ideal for low noise mixing, and high sensitivity detecting. They are particularly well suited for use in Doppler or narrow band video receivers.

#### ■ Outline drawings, mm



#### Maximum Ratings

Junction Operating and Storage Temperature Range

5082-2303, -2900 .....	-60°C to +100°C
1N5711, 1N5712, 5082-2800/10/11 .....	-65°C to +200°C
5082-2835 .....	-60°C to +150°C

DC Power Dissipation

(Measured in an infinite heat sink at  $T_{CASE} = 25^{\circ}C$ )

Derate linearly to zero at maximum rated temperature

5082-2303, -2900 .....	100 mW
1N5711, 1N5712, 5082-2800/10/11 .....	250 mW
5082-2835 .....	150 mW

Peak Inverse Voltage .....  $V_{BR}$

