

# **GaAs Schottky Diode**

## **Technical Data**

#### **HSCH-9401**

#### **Features**

- Low Junction Capacitance typically 35 fF
- Low Series Resistance—typically 6  $\Omega$
- Tri-metal system for improved reliability
- High cut-off frequency
- Polyimide Passivation
- Durable Construction

## **Description**

The HSCH-9401 is a discrete Schottky barrier diode fabricated with the Schottky Barrier Integrated Diode (SBID) process.

## **Applications**

The HSCH-9401 is a general purpose millimeter wave diode that can be used as a detector or as a mixer in applications such as digital radio, LMDS, or video distribution.

#### **Specifications**

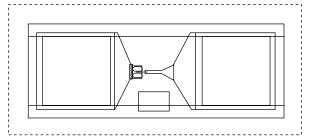
V<sub>f</sub> (1 mA): 630-800 mV
V<sub>f</sub> (10 mA): 730-980 mV

•  $R_S$  (5 mA): <8.5  $\Omega$ 

•  $B_V$  (-10  $\mu$ A): >6 V

• I<sub>r</sub> (-2V): <200 nA

• C<sub>t</sub>: <0.045 pF



Chip Size:  $610 \times 255 \mu m (24 \times 10 \text{ mils})$ 

 $\begin{array}{ll} \text{Chip Size Tolerance:} & \pm 10 \ \mu\text{m} \ (\pm 0.4 \ \text{mils}) \\ \text{Chip Thickness:} & 100 \ \mu\text{m} \ (4 \ \text{mils}) \\ \text{Chip Thickness Tolerance:} & \pm 15 \ \mu\text{m} \ (\pm 0.6 \ \text{mils}) \end{array}$ 

Bond Pad Sizes: 175 x 175 μm (6.9 x 6.9 mils)

