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# GaAs Schottky Diode Antiparallel Pair

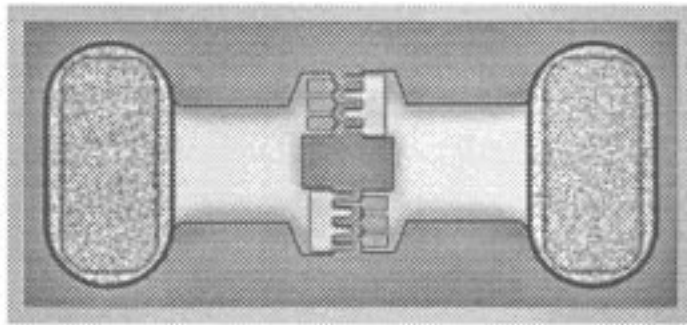
## Technical Data

**HSCH-9551**

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### Features

- **Low Junction Capacitance**— typically 40 fF
- **Low Series Resistance**— typically 3  $\Omega$
- **Large Bond Pads Suitable for Wire-bond or Flip-chip Assembly**
- **Polyimide Scratch Protection**



### Description

The HSCH-9551 is an integrated antiparallel pair of GaAs Schottky barrier diodes. It is a beamless version of the HSCH-9251 antiparallel pair beam lead diode.

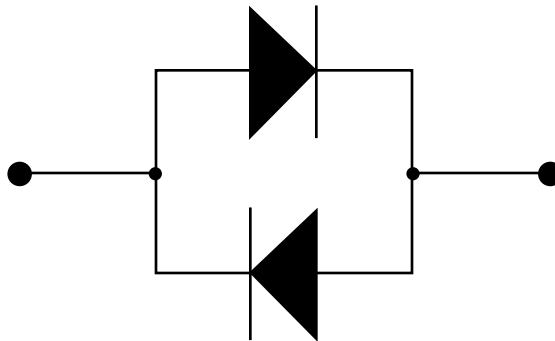
Chip Size:	620 x 325 $\mu\text{m}$ (24.4 x 12.8 mils)
Chip Size Tolerance:	$\pm 10$ $\mu\text{m}$ ( $\pm 0.4$ mils)
Chip Thickness:	100 $\mu\text{m}$ (4 mils)
Chip Thickness Tolerance:	$\pm 15$ $\mu\text{m}$ ( $\pm 0.6$ mils)
Bond Pad Sizes:	100 x 200 $\mu\text{m}$ (3.9 x 7.9 mils)

### Applications

The HSCH-9551 is a high-performance millimeter wave diode that can be used as a sub-harmonically pumped mixer or frequency multiplier in microwave and millimeter wave transceivers.

### Specifications

- **$V_F$  (1 mA): 700-800 mV**
- **$V_F$  (10 mA): 800-850 mV**
- **$R_S$  (5 mA): <6  $\Omega$**
- **$C_J$  (per diode): <0.050 pF**





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This data sheet contains a variety of typical and guaranteed performance data. The information supplied should not be interpreted as a complete list of circuit specifications. In this data sheet the term *typical* refers to the 50th percentile performance. For additional information contact your local HP sales representative.

Data subject to change.  
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