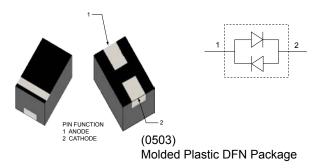
SMGS21GaAs Schottky Diodes







Description

The SMGS21 is a GaAs Schottky diode in a molded plastic DFN package. It is designed for broadband doubler and harmonic mixer. It is in anti-parallel pair configuration. It has a high cutoff frequency and can be used beyond 26.5 GHz..

Features

- Small footprint, only 50 X 30 mils.
- · Close matching of two diode pair characteristics.
- Very low parasitic inductance, series resistance and low parasitic capacitance.

Maximum Ratings

| RATING | LIMITS | UNITS |
|---------------------|--|-------|
| Pin | 20 (at 25 °C) | dBm |
| V _R | 5 | V |
| I _F | 20 | mA |
| T _J | -65 to +175 | °C |
| T _{STG} | -65 to +150 | °C |
| T _{SOLDER} | 260 °C peak 5 sec per JEDEC J-STD-20C. | |
| ESD | Class 0 (Human Body Model) | |

Electrical Specifications, $T_C = +25 \, ^{\circ}\text{C}$

| SYMBOL | | TEST CONDITIONS | MIN | TYPICAL | MAX | UNITS |
|----------------------------|----------------------|-----------------|-----|---------|------|-------|
| V _F | $I_R = 1 \text{ mA}$ | | 620 | _ | 760 | V |
| $\Delta V_{_{\mathrm{F}}}$ | $I_F = 1 \text{ mA}$ | | _ | _ | 20 | mV |
| C _T | $V_R = 0 V$ | F= 1 MHz | | 0.15 | 0.18 | pF |
| Rs | $I_F = 5 \text{ mA}$ | | _ | _ | 7.0 | Ω |



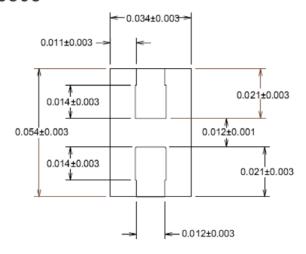
Revision Date: 11/5/2009

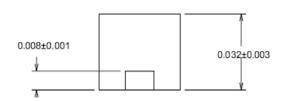


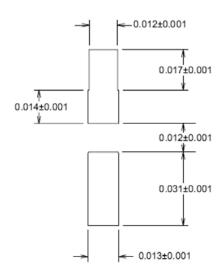


Package Outline

0503



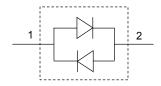




SOLDERING FOOTPRINT

All Dimensions +/-0.001 Inch

Electrical Schematic



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