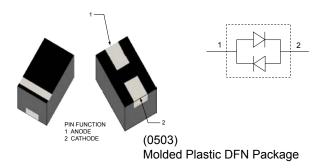
## **SMGS21**GaAs Schottky Diodes







#### **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 <sub>R</sub>	5	V
I <sub>F</sub>	20	mA
T <sub>J</sub>	-65 to +175	°C
T <sub>STG</sub>	-65 to +150	°C
T <sub>SOLDER</sub>	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
$V_{_{\rm F}}$	$I_R = 1 \text{ mA}$			620	_	760	V
$\Delta V_{_{ m F}}$	$I_F = 1 \text{ mA}$			_	_	20	mV
C <sub>T</sub>	$V_R = 0 V$		F= 1 MHz		0.15	0.18	pF
Rs	$I_F = 5 \text{ mA}$			_	_	7.0	Ω

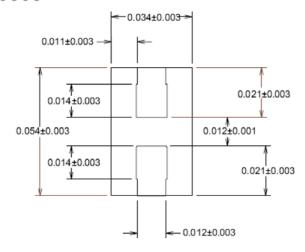


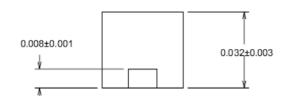
Revision Date: 11/5/2009



#### **Package Outline**

#### 0503



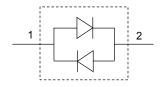


# 0.012±0.001 0.017±0.001 0.012±0.001 0.031±0.001

#### SOLDERING FOOTPRINT

All Dimensions +/-0.001 Inch

#### **Electrical Schematic**



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ISO 9001:2008









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