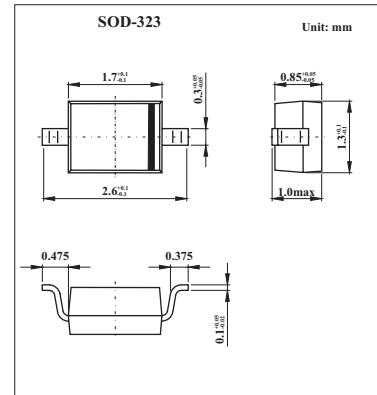


## **SD104BWS**

### ■ Features

- Low turn-on voltage
- Low Capacitance
- Ultrafast switching
- Microminiature plastic package
- Single, double, and ring balanced mixer in narrow band receivers up to 1 GHz
- Detectors and fast switching up to 1 GHz
- Phase detectors
- Suitable for trdios, TV, CTV, and hyper band tuners



### ■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Value	Unit
Continuous Reverse Voltage	V <sub>R</sub>	15	V
Forward Current	I <sub>F</sub>	30	mA
Power Dissipation T <sub>c</sub> = 25 °C	P <sub>tot</sub>	150 <sup>(1)</sup>	mW
Thermal Resistance Junction to Ambient Air	R <sub>θJA</sub>	650 <sup>(1)</sup>	°C/W
Junction Temperature	T <sub>J</sub>	125	°C
Storage Temperature Range	T <sub>S</sub>	-55 to +150	°C

Note:

1. Valid provided that electrodes are kept at ambient temperature

### ■ Electrical Characteristics Ta = 25°C

Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse Breakdown Voltage (Note 2)	V <sub>R</sub>	I <sub>R</sub> = 10 μA	15			V
Leakage Current	I <sub>R</sub>	V <sub>R</sub> = 10V			500	V
Forward Voltage Drop	V <sub>F</sub>	I <sub>F</sub> = 0.1 mA			325	mV
		I <sub>F</sub> = 1.0 mA			425	
		I <sub>F</sub> = 10 mA			580	
Diodes Capacitance	C <sub>D</sub>	V <sub>R</sub> = 0 V, f = 1 MHz			0.9	pF