



SGD102

GaAs Schottky Barrier Diode

C to X Band, Mixer, Modulator Applications

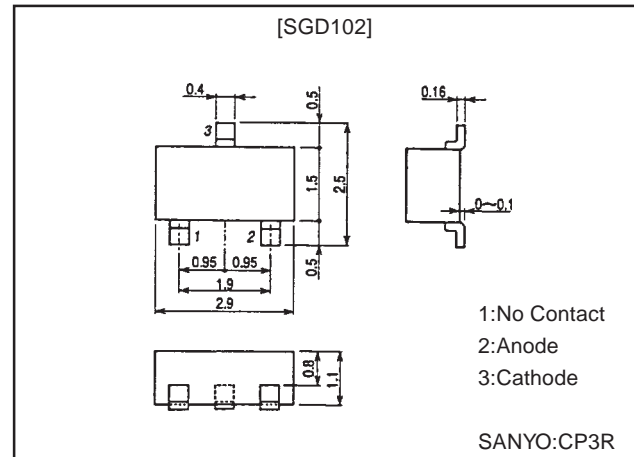
Features

- Ultrasmall-sized package.
- Less parasitic components, conversion loss.

Package Dimensions

unit:mm

1276



Specifications

Absolute Maximum Ratings at Ta = 25°C

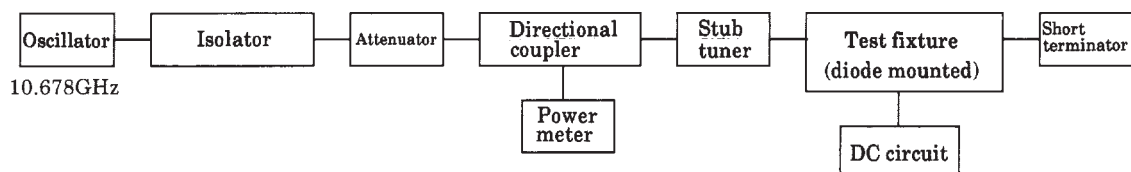
Parameter	Symbol	Conditions	Ratings	Unit
Peak Reverse Voltage	V_{RM}		4.5	V
Reverse Voltage	V_R		4.0	V
Peak Forward Current	I_{FM}		150	mA
Average Rectified Current	I_O		50	mA
Junction Temperature	T_j		150	°C
Storage Temperature	T_{stg}		-55 to +150	°C

Electrical Characteristics at Ta = 25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Forward Voltage	V_F	$I_F=20\text{mA}$		0.8	0.9	V
Reverse Voltage	V_R	$I_R=10\mu\text{A}$	4.0	6.0		V
Interterminal Capacitance	C_t	$V=0\text{V}, f=1\text{MHz}$		0.3	0.4	pF
Series Resistance	R_S	$I_F=20\text{mA}$		1.5	3.0	Ω
Conversion Loss	L_C	Measured using the DC incremental method* $f=10.678\text{GHz}, P=10\text{mW}$		4.0		dB

Note)*: Conversion loss measurement diagram

For measurement of conversion loss, do a sampling from the lot population and use the DC incremental method for measurement.



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