



SGD102

GaAs Schottky Barrier Diode

C to X Band, Mixer, Modulator Applications

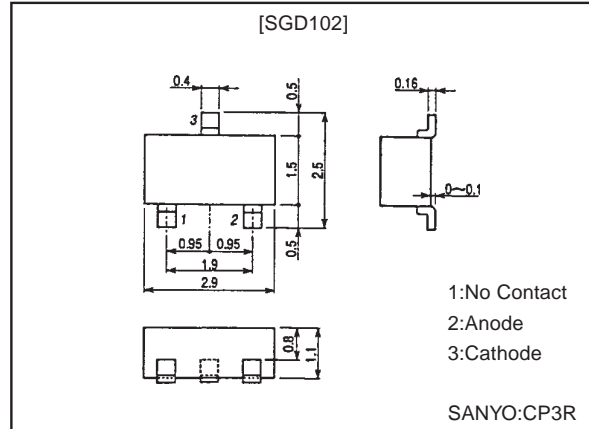
Features

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

Package Dimensions

unit:mm

1276



Specifications

Absolute Maximum Ratings at Ta = 25°C

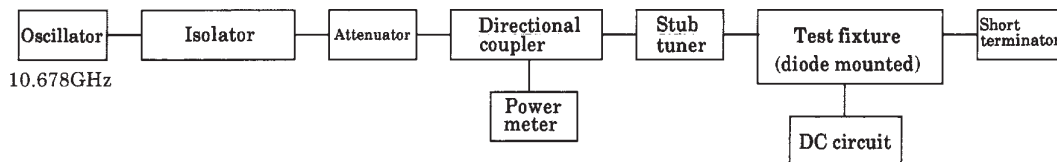
Parameter	Symbol	Conditions	Ratings	Unit
Peak Reverse Voltage	V_{RM}		4.5	V
Reverse Voltage	V_R		4.0	V
Peak Forward Current	I_{FM}		150	mA
Average Rectified Current	I_O		50	mA
Junction Temperature	T_J		150	°C
Storage Temperature	T_{stg}		-55 to +150	°C

Electrical Characteristics at Ta = 25°C

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



SANYO Electric Co.,Ltd. Semiconductor Business Headquarters

TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110-8534 JAPAN

22898HA (KT)/D1096GI/ (KOTO) X-8179 No.5581-1/2

- No products described or contained herein are intended for use in surgical implants, life-support systems, aerospace equipment, nuclear power control systems, vehicles, disaster/crime-prevention equipment and the like, the failure of which may directly or indirectly cause injury, death or property loss.
- Anyone purchasing any products described or contained herein for an above-mentioned use shall:
 - ① Accept full responsibility and indemnify and defend SANYO ELECTRIC CO., LTD., its affiliates, subsidiaries and distributors and all their officers and employees, jointly and severally, against any and all claims and litigation and all damages, cost and expenses associated with such use:
 - ② Not impose any responsibility for any fault or negligence which may be cited in any such claim or litigation on SANYO ELECTRIC CO., LTD., its affiliates, subsidiaries and distributors or any of their officers and employees jointly or severally.
- Information (including circuit diagrams and circuit parameters) herein is for example only; it is not guaranteed for volume production. SANYO believes information herein is accurate and reliable, but no guarantees are made or implied regarding its use or any infringements of intellectual property rights or other rights of third parties.

This catalog provides information as of February, 1998. Specifications and information herein are subject to change without notice.