

2SK1234 — N-Channel GaAs MES FET 4GHz-Band Local Oscillator, Amplifier Applications

Features

- Casting mold package
- Suited for 4GHz-band local oscillator
- Adoption of high reliable protection film

Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Value	unit
Drain to Source Voltage	V _{DS}	5	V
Gate to Source Voltage	V _{GS}	-5	V
Drain Current	I _D	100	mA
Allowable Power Dissipation	P _D	270	mW
Junction Temperature	T _j	150	°C
Storage Temperature	T _{stg}	-65 to +150	°C

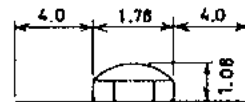
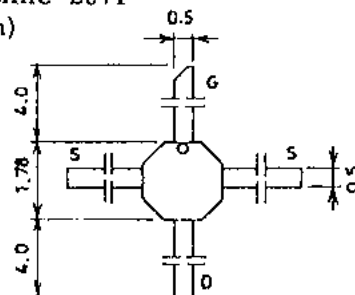
Electrical Characteristics at Ta = 25°C

Parameter	Symbol	Test Conditions	min	typ	max	unit
Gate to Drain Breakdown Voltage	V _{(BR)GDS}	I _G = -10μA, V _{DS} = 0V	-5			V
Gate Cutoff Current	I _{GSS}	V _{GS} = -3V, V _{DS} = 0V			-10	μA
Drain Current	I _{DSS}	V _{DS} = 3V, V _{GS} = 0V	20	50	80	mA
Gate to Source Cutoff Voltage	V _{GS(off)}	V _{DS} = 3V, I _D = 100μA	-0.5		-3	V
Forward Transfer Admittance	y _{fs}	V _{DS} = 3V, I _D = 10mA	30	40		mS
Noise Figure	NF	V _{DS} = 3V, I _D = 10mA, f = 4GHz		0.8	1.1	dB
Associated Gain	G _a	V _{DS} = 3V, I _D = 10mA, f = 4GHz	11	13		dB
		f = 8GHz		9		dB
Maximum Stabilized Power Gain	MSG	V _{DS} = 3V, I _D = 30mA, f = 4GHz		15		dB
Maximum Oscillation Frequency	f _{max}	V _{DS} = 3V, I _D = 30mA		60		GHz

The application circuit diagrams and circuit constants herein are included as an example and provide no guarantee for designing equipment to be mass-produced. The information herein is believed to be accurate and reliable. However, no responsibility is assumed by SANYO for its use, nor for any infringements of patents or other rights of third parties which may result from its use.

Case Outline 2071

(unit : mm)



G: Gate
S: Source
D: Drain

Specifications and information herein are subject to change without notice.

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