No.3163

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

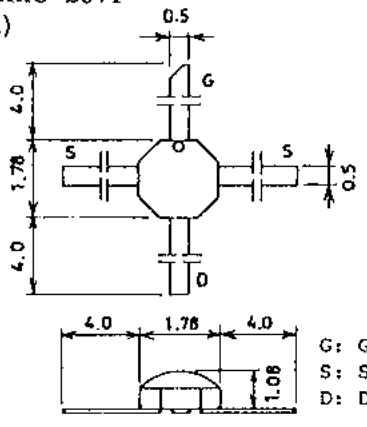
Absolute Maximum Ratings at Ta = 25°C

			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	Tj	150	°C
Storage Temperature	Tstg	−65 to +150	°C

Electrical Characteristics at Ta = 25°C

				min	typ	max	unit
Gate to Drain Breakdown Voltage	$V_{(BR)GDS}$	$I_G = -10\mu A, V_{DS} = 0V$		−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	$V_{GS(off)}$	$V_{DS} = 3V, I_D = 100\mu A$		−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
			f = 8GHz		1.6		dB
Associated Gain	Ga	$V_{DS} = 3V, I_D = 10mA$,	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	fmax	$V_{DS} = 3V, I_D = 30mA$			60		GHz

Case Outline 2071
(unit : mm)



Specifications and information herein are subject to change without notice.

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