No.3166

2SK1237

N-Channel GaAs MES FET

12GHz-Band Local Oscillator, Amplifier Applications

Features

- Ceramic package
- High gain
- Adoption of high reliable protection film

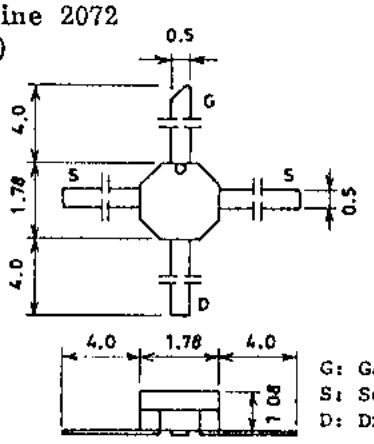
Absolute Maximum Ratings at Ta = 25°C

			unit
Drain to Source Voltage	V_{DS}	5	V
Gate to Source Voltage	V_{GS}	−5	V
Drain Current	I_D	70	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 = 12GHz		1.8		dB
Associated Gain	Ga	$V_{DS} = 3V, I_D = 10mA$, f = 12GHz		7		dB
Maximum Available Power Gain	MAG	$V_{DS} = 3V, I_D = 10mA$, f = 12GHz		10		dB
Maximum Oscillation Frequency	f max	$V_{DS} = 3V, I_D = 30mA$		70		GHz

Case Outline 2072
(unit : mm)



Specifications and information herein are subject to change without notice.

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