

**SANYO**

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**

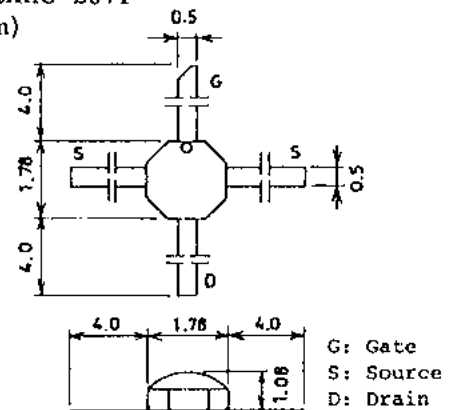
			unit
Drain to Source Voltage	V <sub>DS</sub>	5	V
Gate to Source Voltage	V <sub>GS</sub>	-5	V
Drain Current	I <sub>D</sub>	100	mA
Allowable Power Dissipation	P <sub>D</sub>	270	mW
Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature	T <sub>stg</sub>	-65 to +150	°C

**Electrical Characteristics at Ta = 25°C**

			min	typ	max	unit
Gate to Drain Breakdown Voltage	V <sub>(BR)GDS</sub>	I <sub>G</sub> = -10μA, V <sub>DS</sub> = 0V	-5			V
Gate Cutoff Current	I <sub>GSS</sub>	V <sub>GS</sub> = -3V, V <sub>DS</sub> = 0V			-10	μA
Drain Current	I <sub>DSS</sub>	V <sub>DS</sub> = 3V, V <sub>GS</sub> = 0V	20	50	80	mA
Gate to Source Cutoff Voltage	V <sub>GS(off)</sub>	V <sub>DS</sub> = 3V, I <sub>D</sub> = 100μA	-0.5		-3	V
Forward Transfer Admittance	y <sub>fd</sub>	V <sub>DS</sub> = 3V, I <sub>D</sub> = 10mA	30	40		mS
Noise Figure	NF	V <sub>DS</sub> = 3V, I <sub>D</sub> = 10mA, f = 4GHz		0.8	1.1	dB
		f = 8GHz		1.6		dB
Associated Gain	G <sub>a</sub>	V <sub>DS</sub> = 3V, I <sub>D</sub> = 10mA, f = 4GHz	11	13		dB
		f = 8GHz		9		dB
Maximum Stabilized Power Gain	MSG	V <sub>DS</sub> = 3V, I <sub>D</sub> = 30mA, f = 4GHz		15		dB
Maximum Oscillation Frequency	f <sub>max</sub>	V <sub>DS</sub> = 3V, I <sub>D</sub> = 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)



Specifications and information herein are subject to change without notice.

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