

MA P 3 0 7 9

The item can replace 2SK3079



Approved by:
Checked by:
Issued by:

SPECIFICATION

PRODUCT: N-channel MOSFET

MODEL: MAP 3 0 7 9 SOT 2 2 3

HOPE MICROELECTRONIC CO.,LIMITED

MAP3079

900 MHz BAND AMPLIFIER APPLICATIONS (GSM)

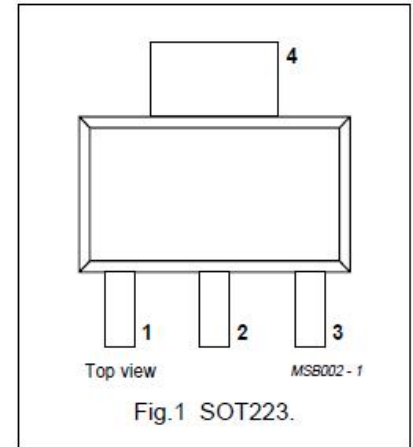
- Output Power : $P_O = 33.0\text{dBmW}$ (Min)
- Gain : $G_P = 7.0\text{dB}$ (Min)
- Drain Efficiency : $\eta_D = 40\%$ (Min)

MAXIMUM RATINGS ($T_a = 25^\circ\text{C}$)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Drain-Source Voltage	V_{DSS}	10	V
Gate-Source Voltage	V_{GSS}	5	V
Drain Current	I_D	5	A
Power Dissipation	P_{D^*}	20.0	W
Channel Temperature	T_{ch}	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-45~150	$^\circ\text{C}$

*: $T_c = 25^\circ\text{C}$ When mounted on a 1.6 mm glass epoxy PCB

Unit: mm



PINNING

PIN	DESCRIPTION
1	emitter
2	base
3	emitter
4	collector

ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	TYP.	MAX	UNIT
Output Power	P_O	$V_{DS} = 4.8V$ Idle = 800 mA ($V_{GS} = \text{adjust}$) $f = 915\text{MHz}$, $P_i = 26\text{dBmW}$ $Z_G = Z_L = 50\ \Omega$	33.0	—	—	dBmW
Drain Efficiency	η_D		40.0	—	—	%
Power Gain	G_P		7.0	—	—	dB
Threshold Voltage	V_{th}	$V_{DS} = 4.8V$, $I_D = 0.5\ \text{mA}$	0.30	—	1.30	V
Drain Cut-off Current	I_{DSS}	$V_{DS} = 10V$, $V_{GS} = 0V$	—	—	10	μA
Gate-Source Leakage Current	I_{GSS}	$V_{GS} = 5V$, $V_{DS} = 0V$	—	—	5	μA
Load Mismatch	—	$V_{DS} = 6.5V$, $f = 915\ \text{MHz}$ $P_i = 26\text{dBmW}$ $P_O = 33.0\text{dBmW}$ ($V_{GS} = \text{adjust}$) VSWR LOAD 10: 1 all phase	No Degradation			—

CAUTION

This transistor is the electrostatic sensitive device.
Please handle with caution.

RF OUTPUT POWER TEST FIXTURE

