

2SK3079

900 MHz BAND AMPLIFIER APPLICATIONS (GSM)

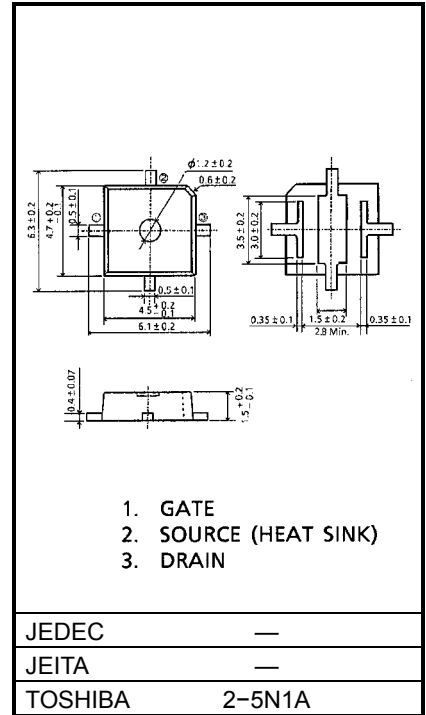
- Output Power : $P_O = 33.0\text{dBmW}$ (Min)
- Gain : $G_P = 7.0\text{dB}$ (Min)
- Drain Efficiency : $\eta_D = 40\%$ (Min)

MAXIMUM RATINGS (Ta = 25°C)

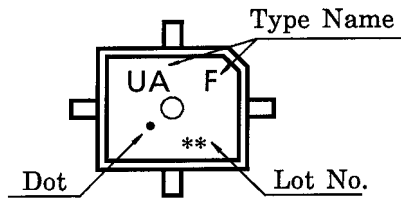
CHARACTERISTIC	SYMBOL	RATING	UNIT
Drain-Source Voltage	V_{DSS}	10	V
Gate-Source Voltage	V_{GSS}	5	V
Drain Current	I_D	5	A
Power Dissipation	P_{D^*}	20.0	W
Channel Temperature	T_{ch}	150	°C
Storage Temperature Range	T_{stg}	-45~150	°C

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

Unit: mm



MARKING



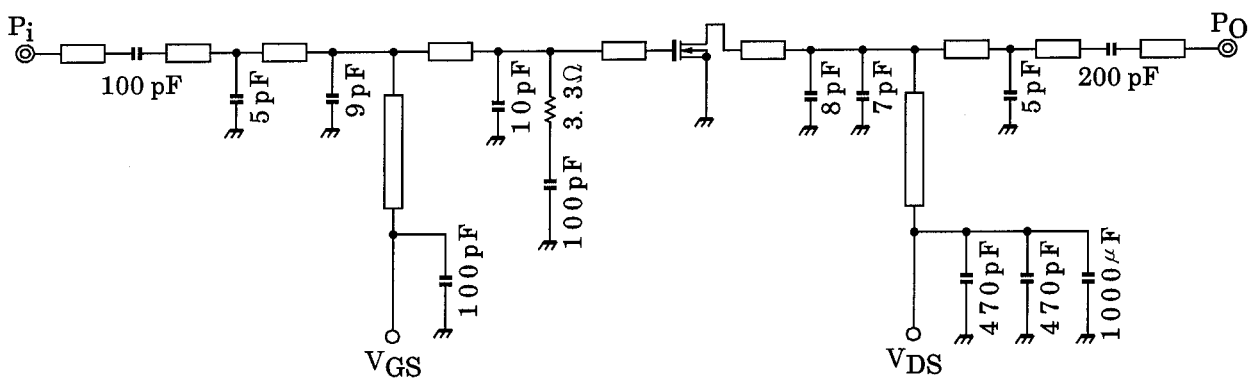
ELECTRICAL CHARACTERISTICS (Ta = 25°C)

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

CAUTION

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

RF OUTPUT POWER TEST FIXTURE



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