

2SK3077

900 MHz BAND AMPLIFIER APPLICATIONS (GSM)

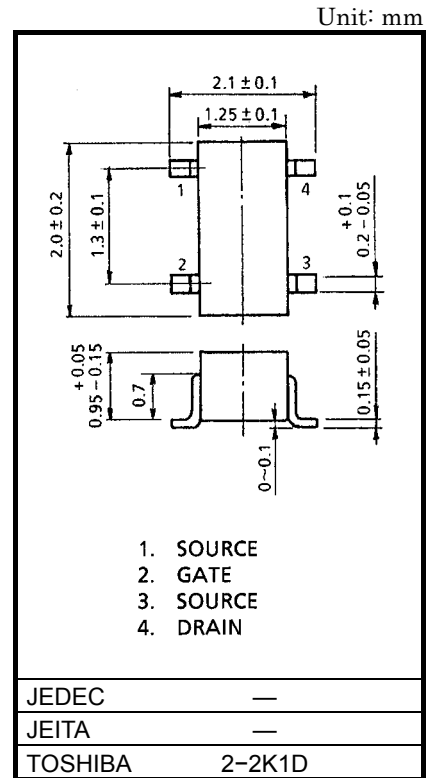
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- Output Power : $P_O = 15.0 \text{ dBmW (Min.)}$
- Gain : $G_P = 15.0 \text{ dB (Min.)}$
- Drain Efficiency : $\eta_D = 20\% \text{ (Typ.)}$

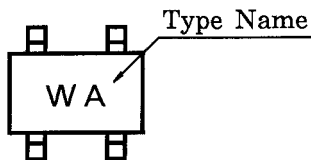
MAXIMUM RATINGS ($T_a = 25^\circ\text{C}$)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Drain-Source Voltage	V_{DSS}	10	V
Gate-Source Voltage	V_{GSS}	5	V
Drain Current	I_D	0.1	A
Power Dissipation	P_{D^*}	250	mW
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



MARKING



ELECTRICAL CHARACTERISTICS (Ta = 25°C)

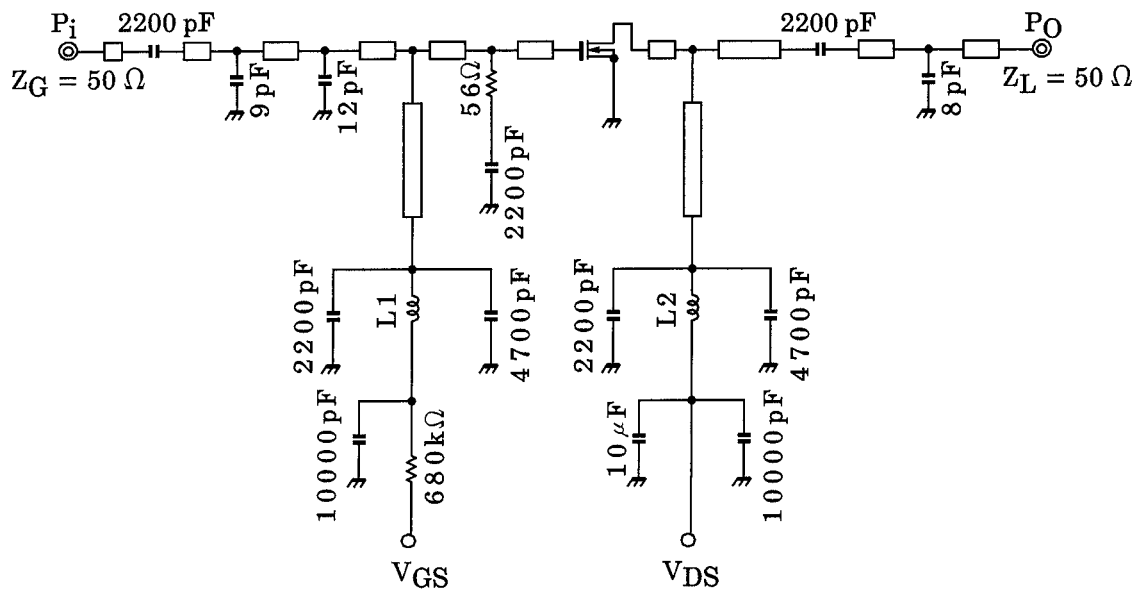
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	TYP.	MAX	UNIT
Output Power	P_O	$V_{DS} = 4.8V$ $I_{D} = 43\text{ mA}$ ($V_{GS} = \text{adjust}$) $f = 915\text{ MHz}$, $P_i = 0\text{ dBmW}$	15.0	—	—	dBmW
Drain Efficiency	η_D		—	20.0	—	%
Power Gain	G_p		15.0	—	—	dB
Threshold Voltage	V_{th}	$V_{DS} = 4.8\text{ V}$, $I_D = 0.5\text{ mA}$	0.25	—	1.25	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

Note 1: These characteristic values are measured using measurement tools specified by Toshiba.

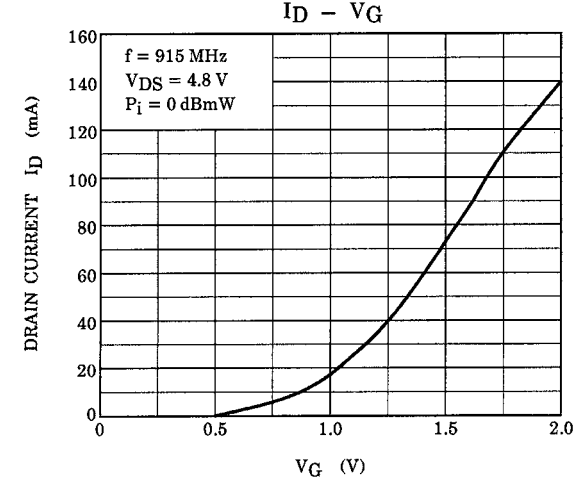
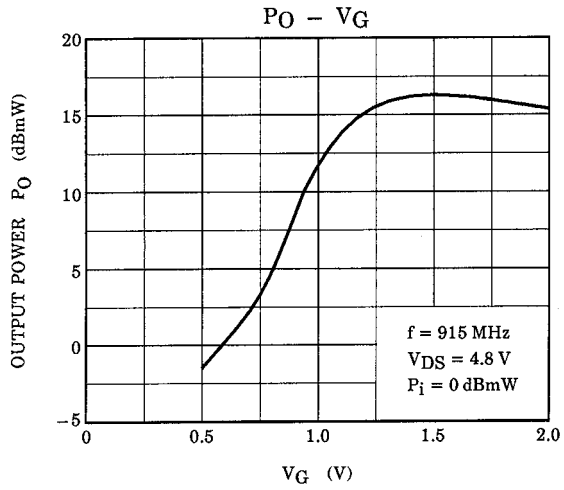
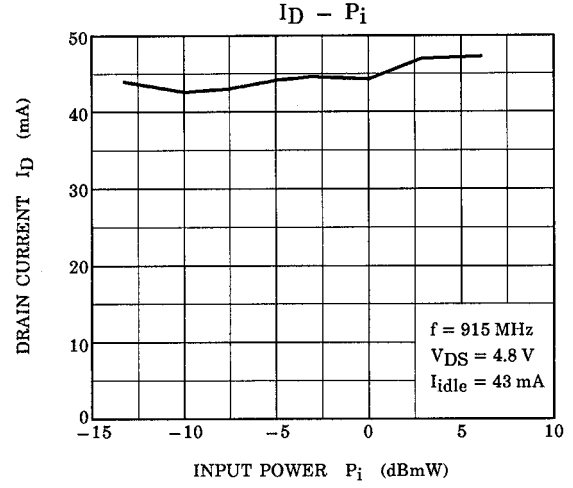
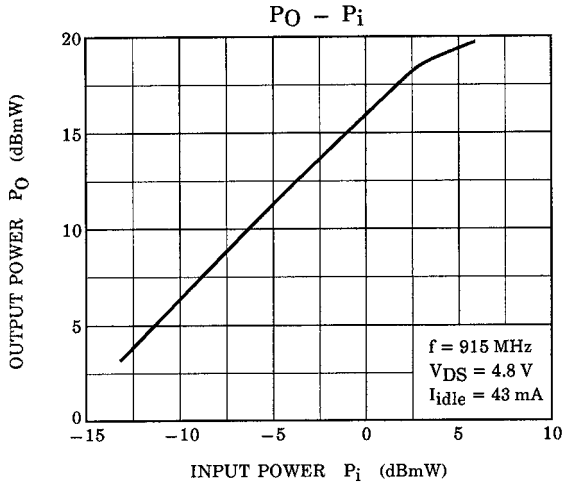
CAUTION

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

RF OUTPUT POWER TEST FIXTURE



- L1 : $\phi 0.6\text{ mm}$, 5.5 mmID, 5T
- L2 : $\phi 0.6\text{ mm}$, 5.5 mmID, 8T



CAUTION

These are only typical curves and devices are not necessarily guaranteed at these curves.

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