

TOSHIBA FIELD EFFECT TRANSISTOR SILICON N CHANNEL MOS TYPE

2SK2854

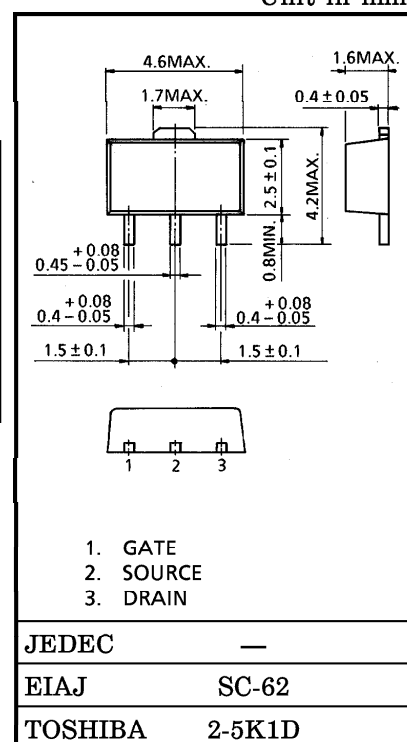
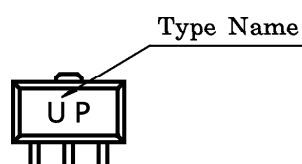
UHF BAND AMPLIFIER APPLICATION

Unit in mm

MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Drain-Source Voltage	V_{DSS}	10	V
Gate-Source Voltage	V_{GSS}	± 6	V
Drain Current	I_D	0.5	A
Drain Power Dissipation	P_D	0.5	W
Channel Temperature	T_{ch}	150	°C
Storage Temperature Range	T_{stg}	-55~150	°C

MARKING



ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Output Power	P_O	$V_{DS}=6V$, $f=849MHz$ $P_i=13dBmW$	23	—	—	dBmW
Drain Efficiency	η_D	$V_{DS}=6V$, $f=849MHz$ $P_i=13dBmW$, $P_O=23dBmW$	40	—	—	%
Drain-Source Breakdown Voltage	$V_{(BR)DSS}$	$V_{GS}=0$, $I_D=1\mu A$	10	—	—	V
Drain Cut-off Current	I_{DSS}	$V_{DS}=6V$, $V_{GS}=0$	—	—	100	nA
Threshold Voltage	V_{th}	$V_{DS}=6V$, $I_D=250\mu A$	1.0	1.4	1.8	V
Gate-Source Leakage Current	I_{GSS}	$V_{GS}=6V$, $V_{DS}=0$	—	—	± 100	nA

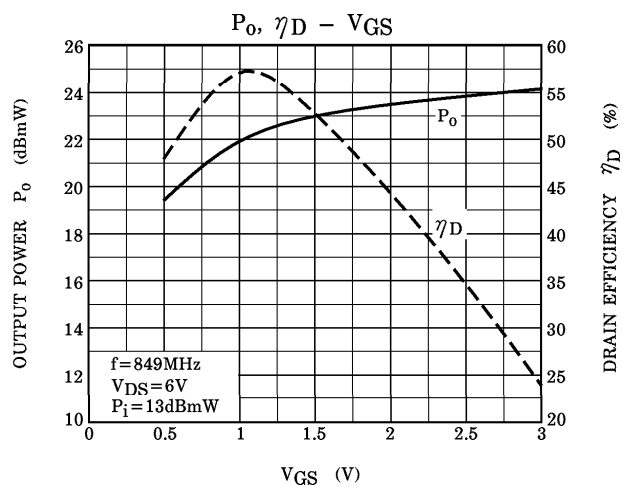
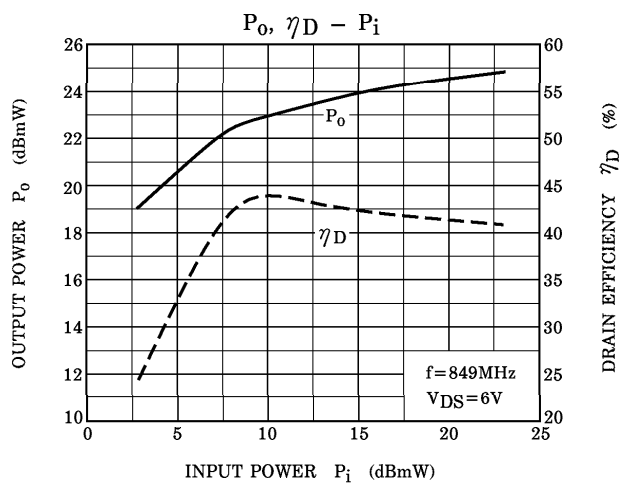
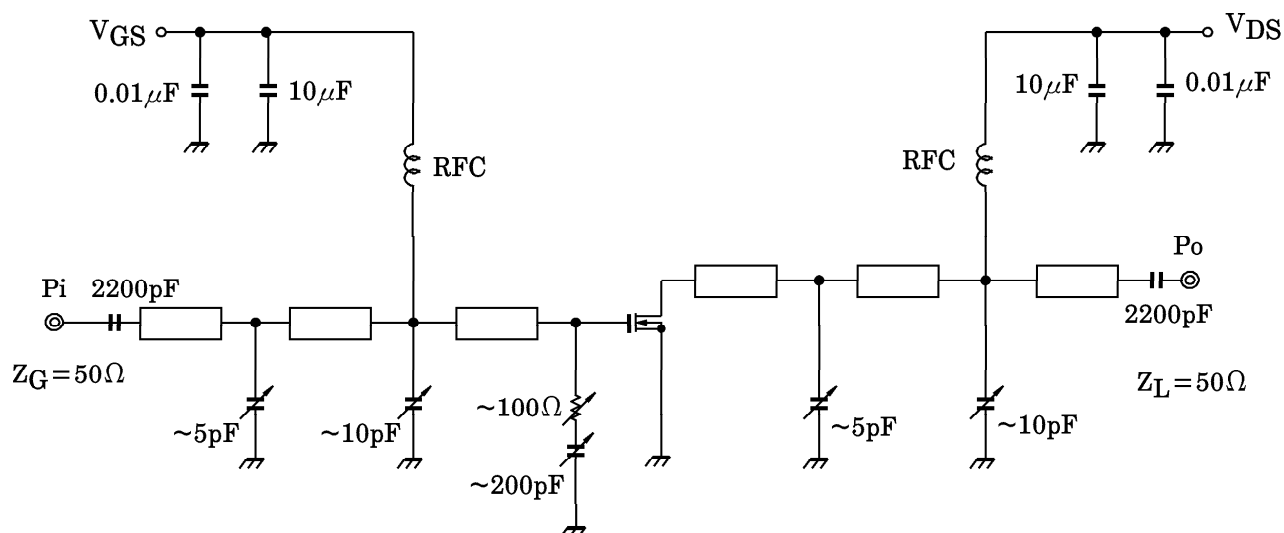
CAUTION

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

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RF OUTPUT POWER TEST FIXTURE



CAUTION

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