TOSHIBA FIELD EFFECT TRANSISTOR SILICON N CHANNEL MOS TYPE

2SK2854

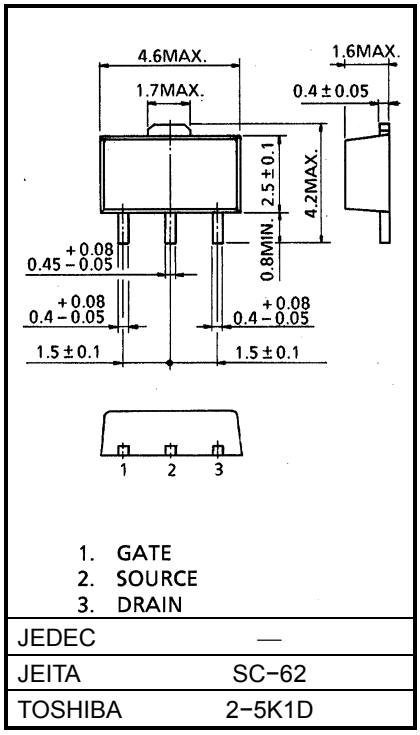
UHF BAND AMPLIFIER APPLICATION

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

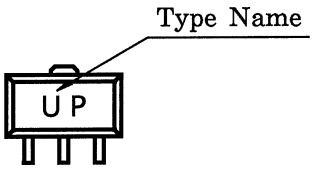
*: Tc = 25°C When mounted on a 1.6mm glass epoxy PCB



1. GATE
2. SOURCE
3. DRAIN

JEDEC	—
JEITA	SC−62
TOSHIBA	2−5K1D

MARKING



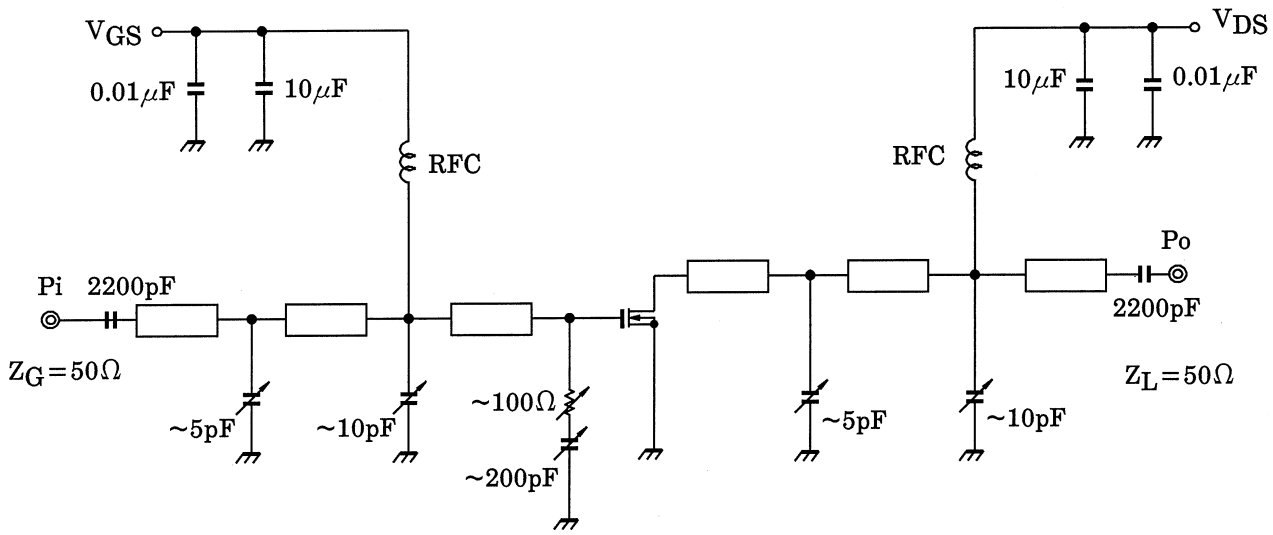
ELECTRICAL CHARACTERISTICS (Ta = 25°C)

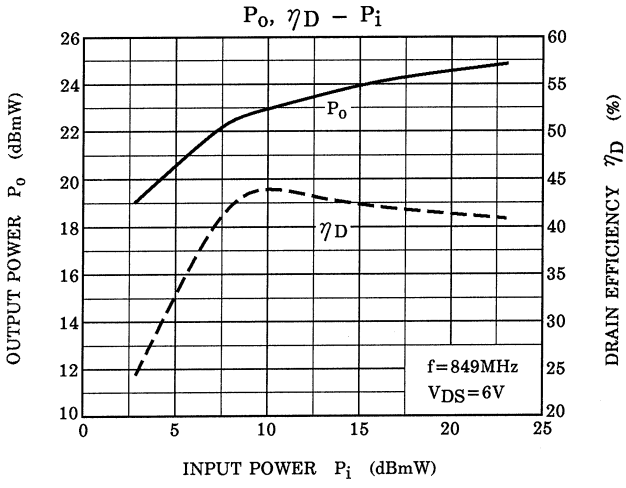
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Output Power	P_O	V_{DS} = 6V, f = 849MHz Pi = 13dBmW	23	—	—	dBmW
Drain Efficiency	η_D	V_{DS} = 6V, f = 849MHz Pi = 13dBmW, P_O = 23dBmW	40	—	—	%
Drain-Source Breakdown Voltage	$V_{(BR)\ DSS}$	V_{GS} = 0, I_D = 1μA	10	—	—	V
Drain Cut-off Current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

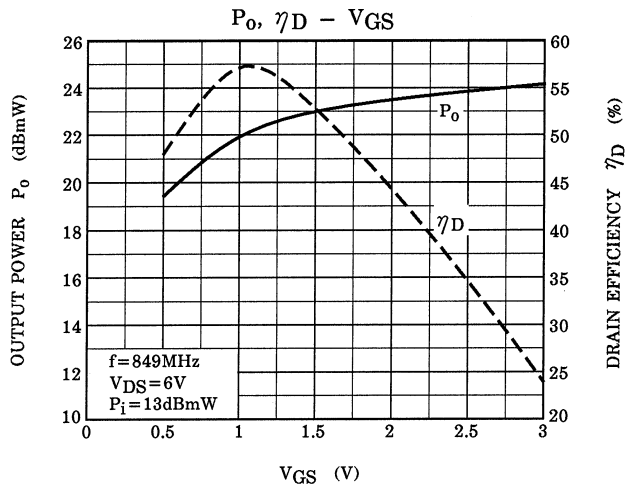
CAUTION

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

RF OUTPUT POWER TEST FIXTURE







CAUTION

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

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