TOSHIBA Field Effect Transistor Silicon N Channel Junction Type

2SK711

High Frequency Amplifier Applications AM High Frequency Amplifier Applications Audio Frequency Amplifier Applications

- High $|Y_{fs}|$: $|Y_{fs}| = 25 \text{ mS (typ.)}$
- Low C_{iss} : $C_{iss} = 7.5 pF$ (typ.)

Absolute Maximum Ratings (Ta = 25°C)

Characteristics	Symbol	Rating	Unit
Gate-drain voltage	V_{GDS}	-20	$(\checkmark \checkmark)$
Gate current	IG	10	mA
Drain power dissipation	P _D	150	mW
Junction temperature	Tj	125	<u></u> აი
Storage temperature range	T _{stg}	-55~125	°C

Note: Using continuously under heavy loads (e.g. the application of high temperature/current/voltage and the significant change in temperature, etc.) may cause this product to decrease in the reliability significantly even if the operating conditions (i.e. operating temperature/current/voltage, etc.) are within the absolute maximum ratings.

Please design the appropriate reliability upon reviewing the

Toshiba Semiconductor Reliability Handbook ("Handling Precautions"/"Derating Concept and Methods") and individual reliability data (i.e. reliability test report and estimated failure rate, etc).

Unit: mm 2.5-0.5 2.5-0.3 +0.25 1.5-0.15 1.50URCE 2.DRAIN 3. GATE JEDEC TO-236MOD JEITA SC-59 TOSHIBA 2-3F1B

Weight: 0.012 g (typ.)

Electrical Characteristics (Ta = 25°C)

Characteristics	Symbol	Test Condition	Min	Тур.	Max	Unit
Gate leakage current	I _{GSS}	$V_{GS} = -15 \text{ V}, V_{DS} = 0 \text{ V}$	_	_	-1.0	nA
Gate-drain breakdown voltage	V (BR) GDS	$V_{DS} = 0 \text{ V, } I_G = -100 \mu\text{A}$	-20	_	_	V
Drain current	IDSS (Note)	V _{DS} = 5 V, V _{GS} = 0 V	6	l	32	mA
Gate-source cut-off voltage	VGS (OFF)	$V_{DS} = 5 \text{ V}, I_{D} = 1 \mu\text{A}$	_	_	-2.5	V
Forward transfer admittance	Yfs	$V_{DS} = 5 \text{ V}, V_{GS} = 0 \text{ V}, f = 1 \text{ kHz}$	15	25	_	mS
Input capacitance	√ C _{iss}	V _{DS} = 5 V, V _{GS} = 0 V, f = 1 MHz	_	7.5	10	pF
Reverse transfer capacitance	C _{rss}	$V_{DS} = 5 \text{ V}, I_{D} = 0 \text{ mA}, f = 1 \text{ MHz}$	_	2	3	pF

Note: IDSS classification

GR: 6~12 mA, BL: 10~20 mA, V: 16~32 mA

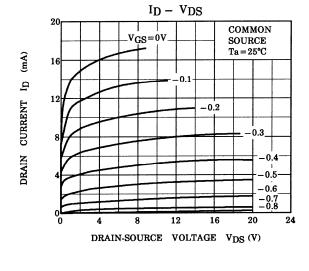
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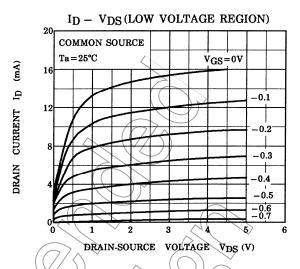
() IDSS rank marking

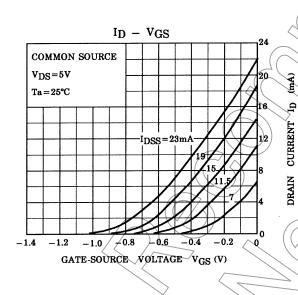
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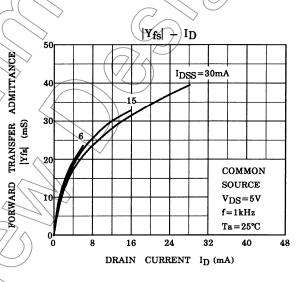


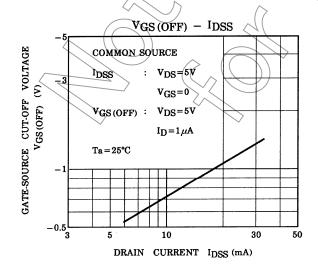
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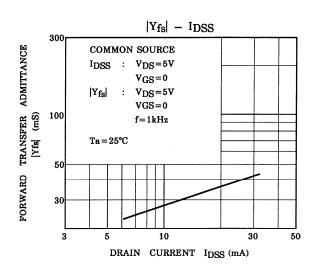




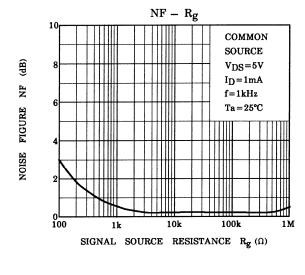


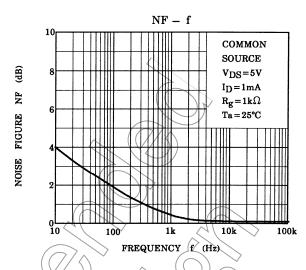


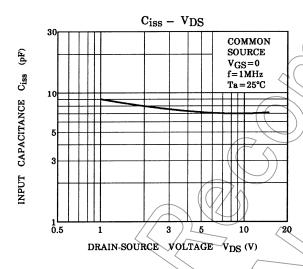


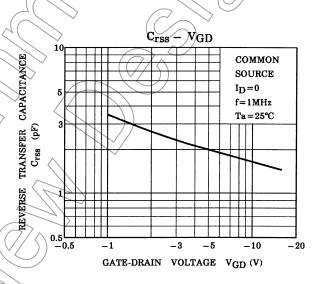


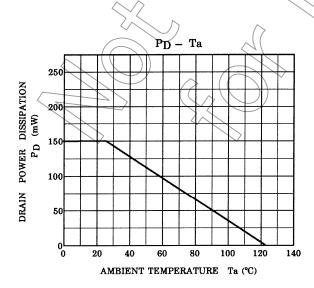
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