TOSHIBA Field Effect Transistor Silicon N Channel Junction Type

2SK1875

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

 $\bullet \quad \mbox{High } |\mbox{Y_{fs}}| \mbox{$:$} |\mbox{Y_{fs}}| = 25 \mbox{ mS (typ.)}$

• Low C_{iss} : $C_{iss} = 7.5 pF$ (typ.)

Maximum Ratings (Ta = 25°C)

Characteristics	Symbol	Rating	Unit
Gate-drain voltage	V_{GDS}	-20	V
Gate current	IG	10	mA
Drain power dissipation	P _D	100	mW
Junction temperature	Tj	125	°C
Storage temperature range	T _{stg}	−55~125	°C

1. SOURCE
2. DRAIN
3. GATE

JEDEC

JEITA

TOSHIBA

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1.25±0.1

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1.10-60

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Weight: 0.006 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}	$V_{DS}=0~V,~I_G=-100~\mu A$	-20	_	_	V
Drain current	I _{DSS} (Note)	V _{DS} = 5 V, V _{GS} = 0 V	6	_	32	mA
Gate-source cut-off voltage	V _{GS (OFF)}	$V_{DS} = 5 \text{ V}, I_D = 1 \mu A$	_	_	-2.5	V
Forward transfer admittance	Y _{fs}	$V_{DS} = 5 \text{ V}, V_{GS} = 0 \text{ V}, f = 1 \text{ kHz}$	15	25	_	mS
Input capacitance	C _{iss}	$V_{DS} = 5 \text{ V}, V_{GS} = 0 \text{ V}, f = 1 \text{ MHz}$	_	7.5	10	pF
Reverse transfer capacitance	C _{rss}	V _{DG} = 5 V, I _D = 0 A, f = 1 MHz	_	2	3	pF

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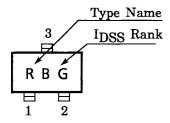
Note: IDSS classification

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

(G) (L) (V)

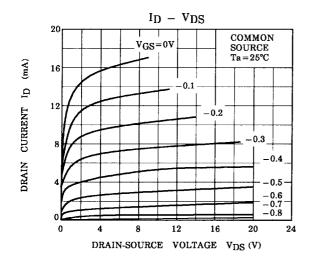
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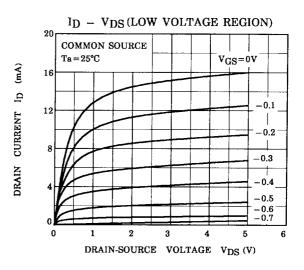
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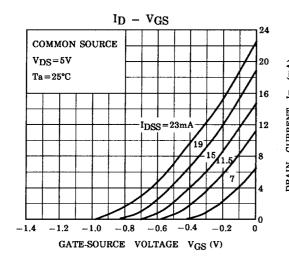


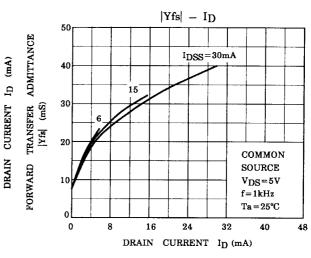
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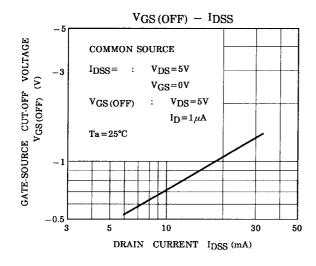
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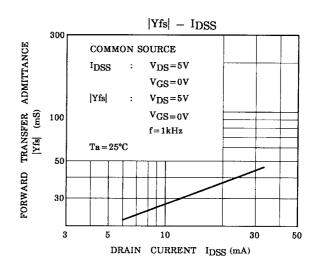


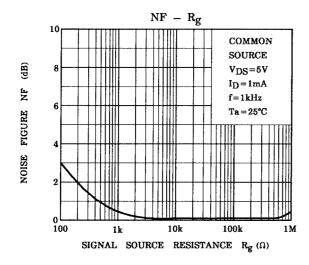


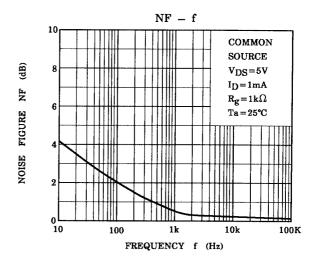


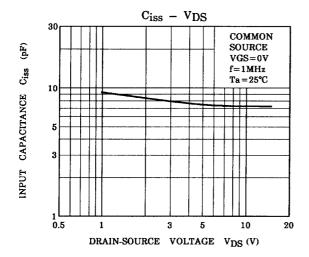


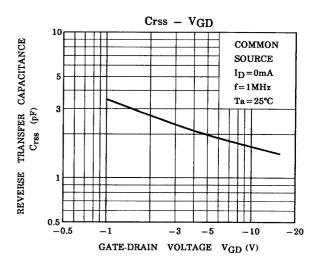


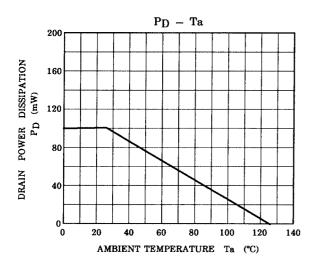












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