TOSHIBA Field Effect Transistor Silicon N Channel Junction Type

2SK365

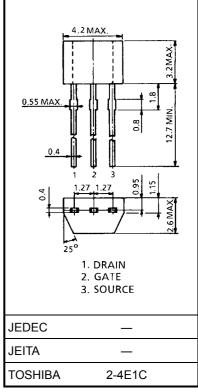
For Audio Amplifier, Analog-Switch, Constant Current and Impedance Converter Applications

- High breakdown voltage: $V_{GDS} = -50 \text{ V}$
- High input impedance: $I_{GSS} = -1.0 \text{ nA (max) (V}_{GS} = -30 \text{ V)}$
- Low RDS (ON): RDS (ON) = 80 Ω (typ.) (IDSS = 5 mA)
- Small package

Maximum Ratings (Ta = 25°C)

Characteristics	Symbol	Rating	Unit
Gate-drain voltage	V_{GDS}	-50	V
Gate current	IG	10	mA
Drain power dissipation	P _D	200	mW
Junction temperature	Tj	125	°C
Storage temperature range	T _{stg}	<i>–</i> 55∼125	°C

Unit: mm



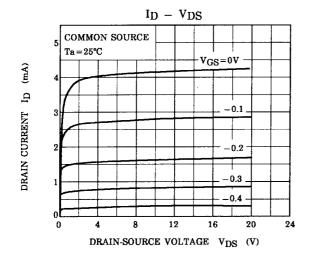
Weight: 0.13 g (typ.)

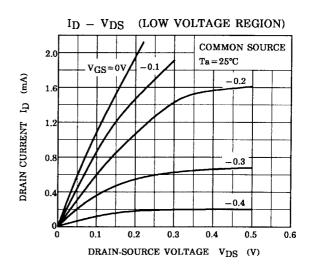
Electrical Characteristics (Ta = 25°C)

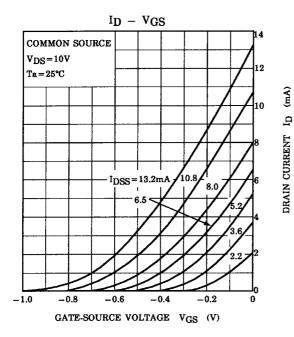
Characteristics	Symbol	Test Condition	Min	Тур.	Max	Unit
Gate cut-off current	I _{GSS}	$V_{GS} = -30 \text{ V}, V_{DS} = 0$	_	_	-1.0	nA
Gate-drain breakdown voltage	V (BR) GDS	$V_{DS} = 0$, $I_G = -100 \mu A$	-50	_	_	V
Drain current	I _{DSS} (Note 1)	V _{DS} = 10 V, V _{GS} = 0	1.2	_	14	mA
Gate-source cut-off voltage	V _{GS} (OFF)	$V_{DS} = 10 \text{ V}, I_D = 0.1 \mu A$	-0.25	_	-1.5	٧
Forward transfer admittance	Y _{fs}	$V_{DS} = 10 \text{ V}, V_{GS} = 0, f = 1 \text{ kHz (Note 2)}$	5.0	19	_	mS
Input capacitance	C _{iss}	$V_{DS} = 10 \text{ V}, V_{GS} = 0, f = 1 \text{ MHz}$	_	13	_	pF
Reverse transfer capacitance	C _{rss}	V _{DG} = 10 V, I _D = 0, f = 1 MHz	_	3	_	pF
Drain-source ON resistance	R _{DS (ON)}	$V_{DS} = 10 \text{ mV}, V_{GS} = 0$ (Note 2)	_	80	_	Ω

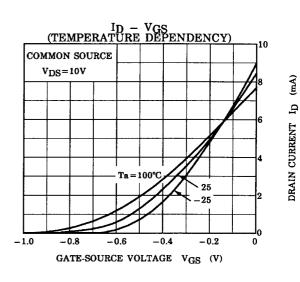
Note 1: I_{DSS} classification Y: 1.2~3.0 mA, GR: 2.6~6.5 mA, BL: 6~14 mA

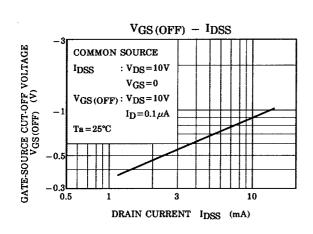
Note 2: Condition of the typical value I_{DSS} = 5 mA

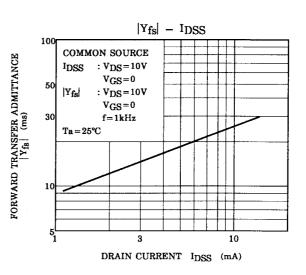






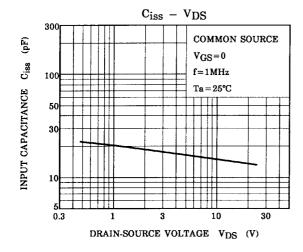


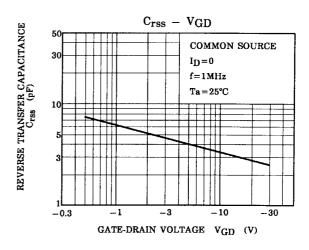


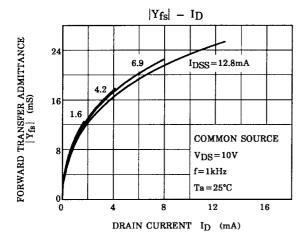


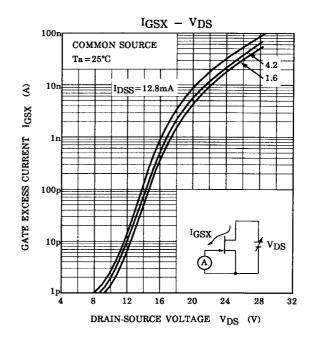
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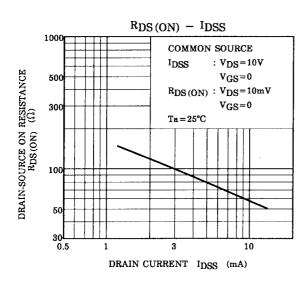
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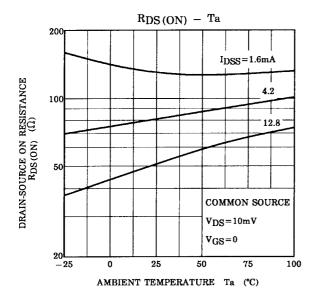


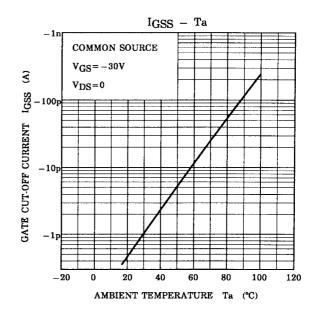


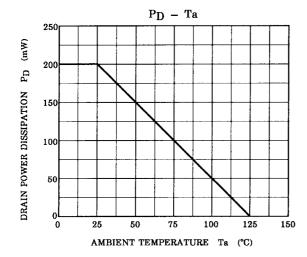




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