TOSHIBA Field Effect Transistor Silicon N Channel Junction Type

2SK373

For Audio, High Voltage Amplifier and Constant Current Applications

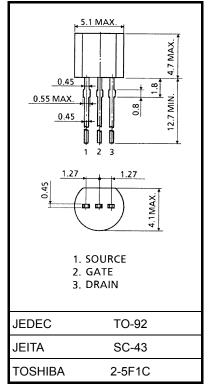
- High breakdown voltage: $V_{GDS} = -100 V (min)$
- High input impedance: $I_{GSS} = -1.0 \text{ nA} (max) (V_{GS} = -80 \text{ V})$

Absolute Maximum Ratings (Ta = 25°C)

Characteristics	Symbol	Rating	Unit
Gate-drain voltage	V _{GDS}	-100	V
Gate current	lG	10	mA
Drain power dissipation	PD	400	mW
Junction temperature	Тј	125	°C
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

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).



Weight: 0.21 g (typ.)

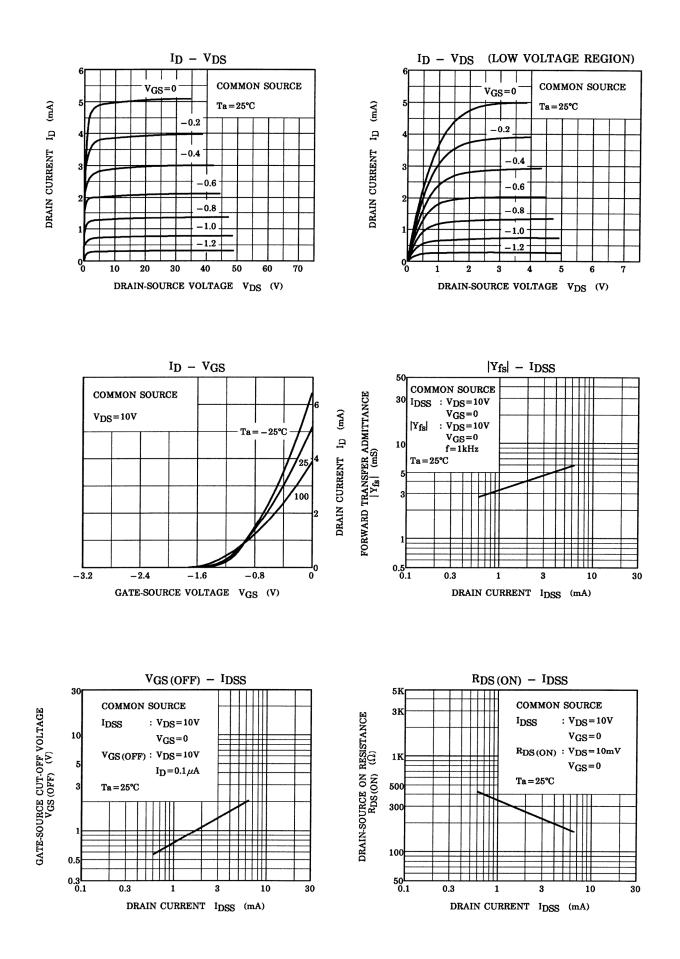
Electrical Characteristics (Ta = 25°C)

Characteristics	Symbol	Test Condition	Min	Тур.	Max	Unit
Gate cut-off current	I _{GSS}	$V_{GS} = -80 \text{ V}, \text{ V}_{DS} = 0$	_	_	-1.0	nA
Gate-drain breakdown voltage	V (BR) GDS	$V_{DS} = 0, I_G = -100 \ \mu A$	-100			V
Drain current	I _{DSS} (Note)	$V_{DS} = 10 \text{ V}, \text{ V}_{GS} = 0$	0.6	_	6.5	mA
Gate-source cut-off voltage	V _{GS (OFF)}	$V_{DS} = 10 \text{ V}, \text{ I}_{D} = 0.1 \mu\text{A}$	-0.4	_	-3.5	V
Forward transfer admittance	Y _{fs}	$V_{DS} = 10 \text{ V}, \text{ V}_{GS} = 0, \text{ f} = 1 \text{ kHz}$	1.5	4.6	_	mS
Input capacitance	C _{iss}	$V_{DS} = 10 \text{ V}, \text{ V}_{GS} = 0, \text{ f} = 1 \text{ MHz}$	_	13	_	pF
Reverse transfer capacitance	C _{rss}	$V_{DG} = 10 \text{ V}, \text{ I}_{D} = 0, \text{ f} = 1 \text{ MHz}$	_	3	_	pF
Noise figure	NF	$V_{DS} = 10 \text{ V}, \text{ V}_{GS} = 0, \text{ R}_{G} = 100 \text{ k}\Omega,$ f = 100 Hz	_	0.5	_	dB

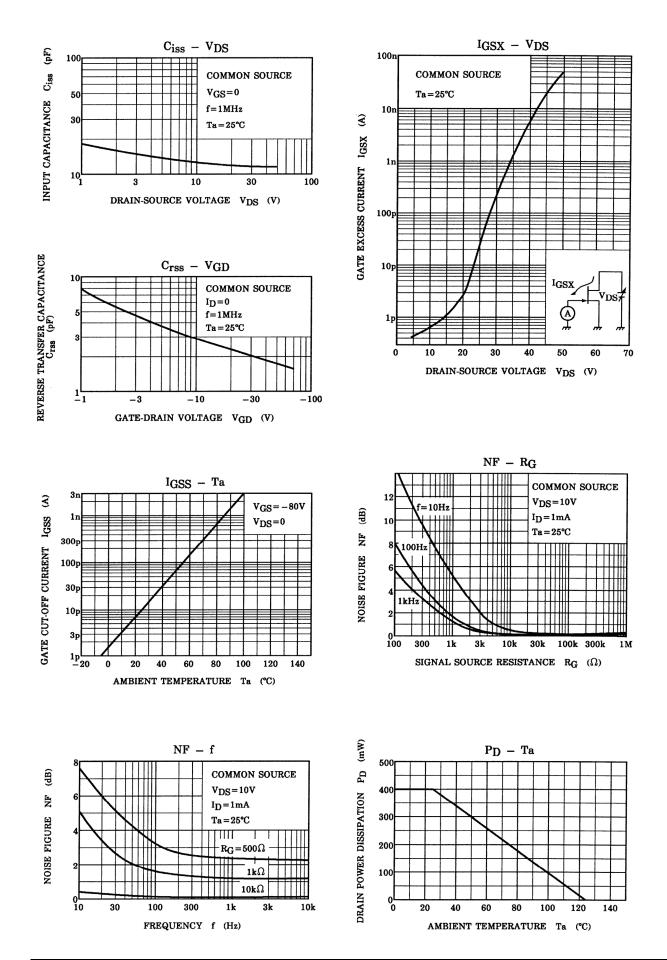
Note: I_{DSS} classification O: 0.6~1.4 mA, Y: 1.2~3.0 mA, GR: 2.6~6.5 mA

Unit: mm

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20070701-EN GENERAL

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