

2SJ0164 (2SJ164)

Silicon P-channel junction FET

For switching circuits

Complementary to 2SK1104

■ Features

- Low ON resistance
- Low-noise characteristics

■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Gate-drain surrender voltage	V_{GDS}	65	V
Drain current	I_D	-20	mA
Gate current	I_G	-10	mA
Power dissipation	P_D	300	mW
Channel temperature	T_{ch}	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

■ Package

- Code
NS-A1
- Pin Name
1: Source
2: Gate
3: Drain

■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Gate-drain surrender voltage	V_{GDS}	$I_G = 10 \mu\text{A}$, $V_{DS} = 0$	65			V
Drain-source current *	I_{DSS}	$V_{DS} = -10 \text{ V}$, $V_{GS} = 0$	-0.6		-6.0	mA
Gate-source cutoff current	I_{GSS}	$V_{GS} = 30 \text{ V}$, $V_{DS} = 0$			10	nA
Gate-source cutoff voltage	V_{GSC}	$V_{DS} = -10 \text{ V}$, $I_D = -10 \mu\text{A}$		1.5	3.5	V
Mutual conductance	g_m	$V_{DS} = -10 \text{ V}$, $I_D = -1 \text{ mA}$, $f = 1 \text{ kHz}$	1.8	2.5		mS
Short-circuit forward transfer capacitance (Common source)	C_{iss}	$V_{DS} = -10 \text{ V}$, $V_{GS} = 0$, $f = 1 \text{ MHz}$		10		pF
Reverse transfer capacitance (Common source)	C_{rss}			3		pF
Drain-source ON resistance	$R_{DS(on)}$	$V_{DS} = -10 \text{ mV}$, $V_{GS} = 0$		300		Ω

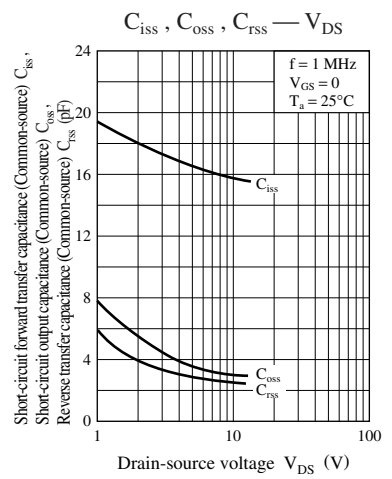
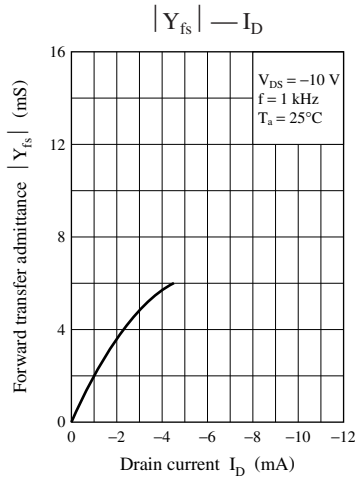
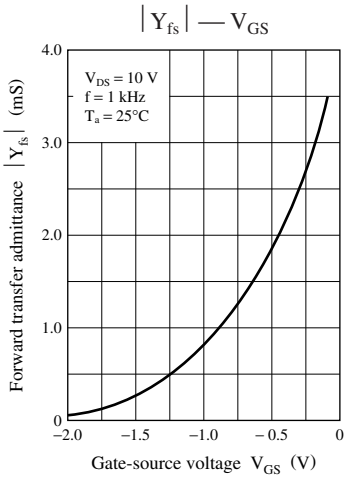
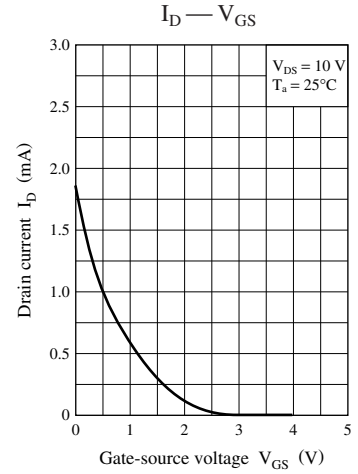
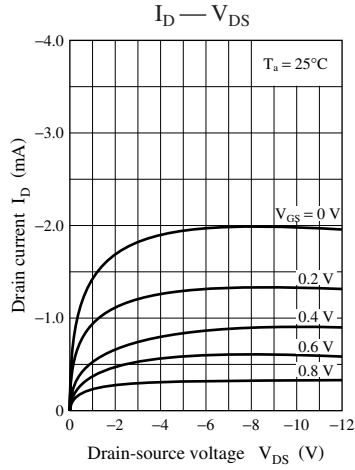
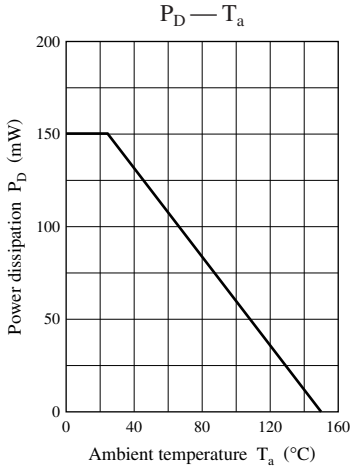
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

2. Observe precautions for handling. Electrostatic sensitive devices.

3. *: Rank classification

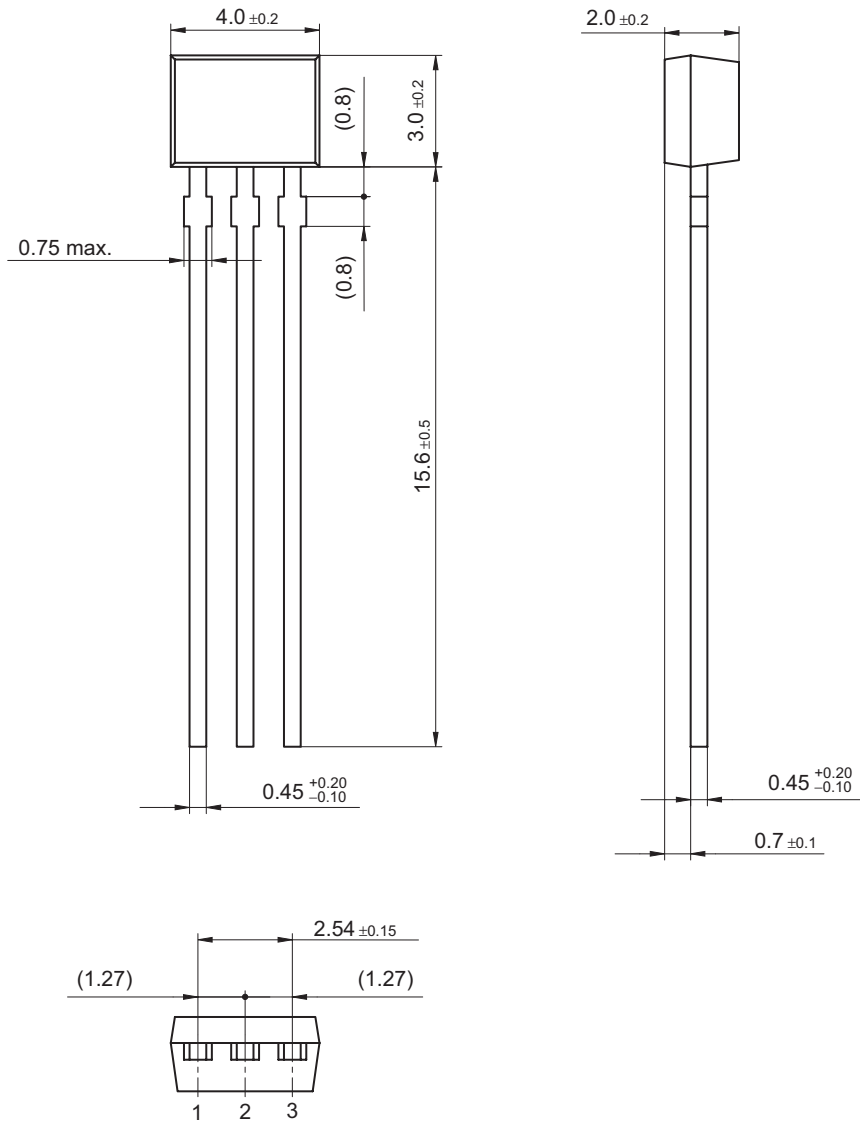
Rank	P	Q	R
I_{DSS} (mA)	-0.6 to -1.5	-1.0 to -3.0	-2.5 to -6.0

Note) The part number in the parenthesis shows conventional part number.



NS-A1

Unit: mm



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