Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

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2SJ0164 (2SJ164)

Silicon P-channel junction FET

For switching circuits
Complementary to 2SK1104

■ Features

- Low ON resistance
- Low-noise characteristics

■ Package

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

■ Absolute Maximum Ratings $T_a = 25°C$

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	°C
Storage temperature	T_{stg}	−55 to +150	°C

■ Electrical Characteristics $T_a = 25°C \pm 3°C$

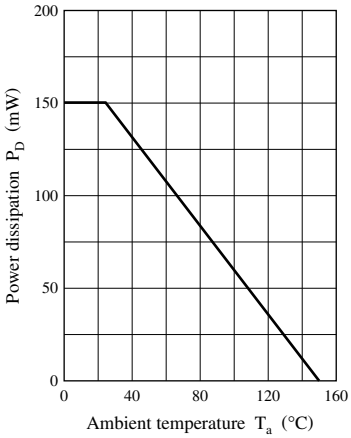
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Gate-drain surrender voltage	V_{GDS}	$I_G = 10\ \mu A$, $V_{DS} = 0$	65			V
Drain-source current *	I_{DSS}	$V_{DS} = -10$ V, $V_{GS} = 0$	− 0.6		−6.0	mA
Gate-source cutoff current	I_{GSS}	$V_{GS} = 30$ V, $V_{DS} = 0$			10	nA
Gate-source cutoff voltage	V_{GSC}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

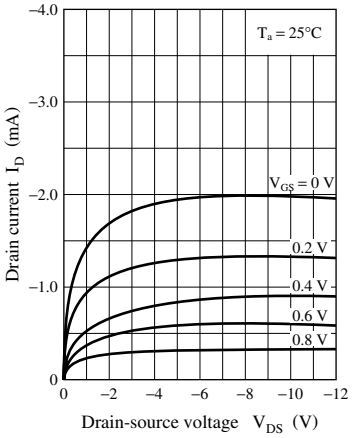
Rank	P	Q	R
I_{DSS} (mA)	− 0.6 to −1.5	−1.0 to −3.0	−2.5 to −6.0

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

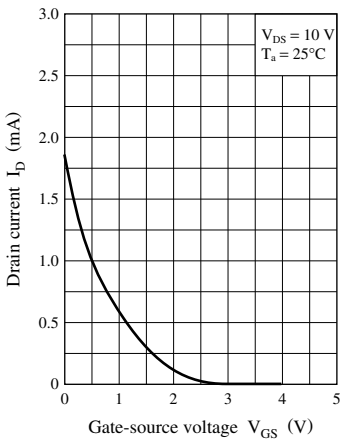
P_D — T_a



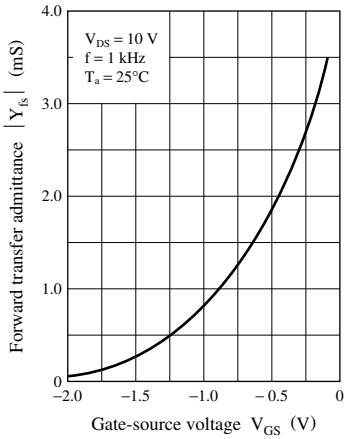
I_D — V_{DS}



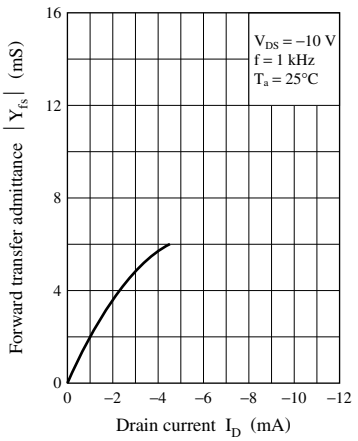
I_D — V_{GS}



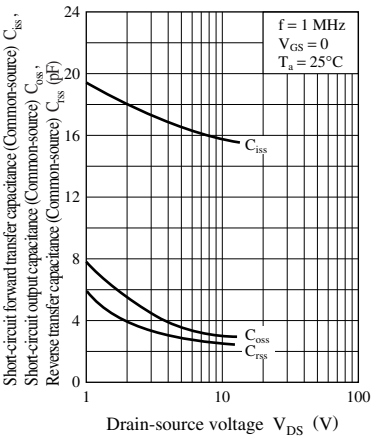
$|Y_{fs}|$ — V_{GS}



$|Y_{fs}|$ — I_D

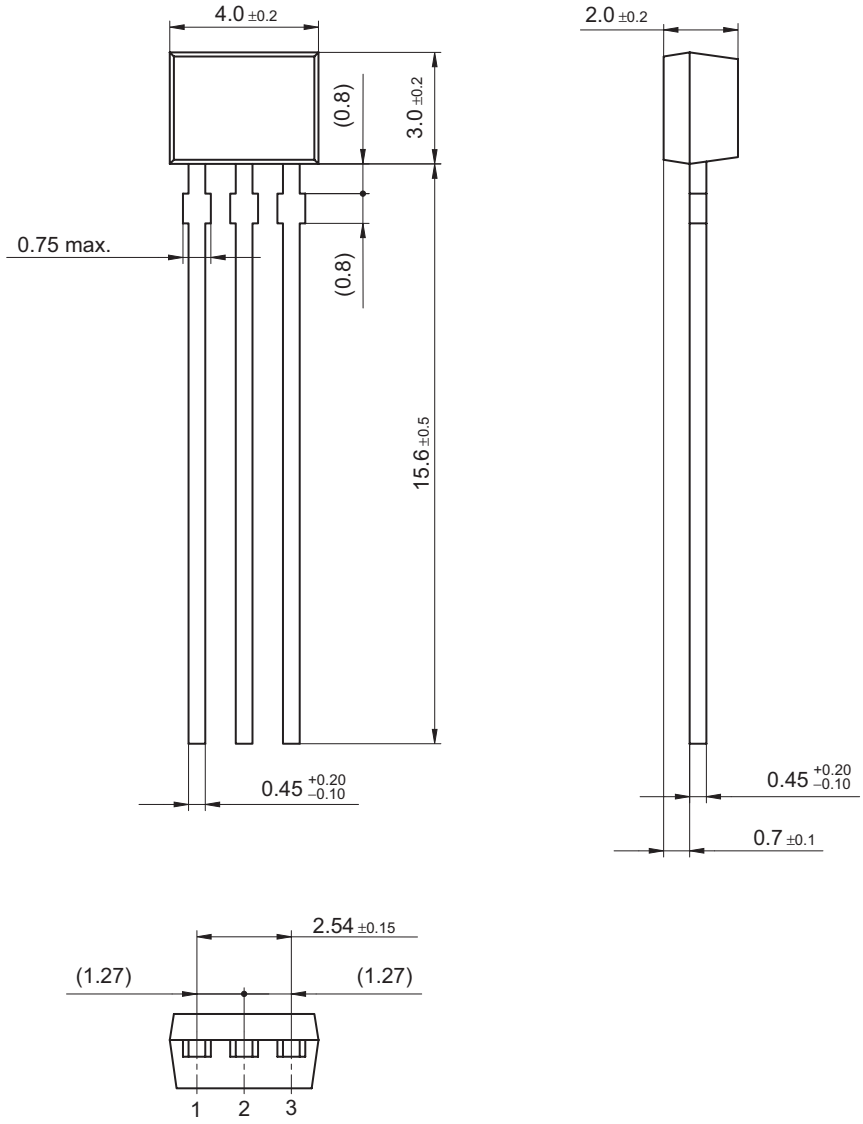


C_{iss} , C_{oss} , C_{rss} — V_{DS}



NS-A1

Unit: mm


4.0 ±0.2
(0.8)
3.0 ±0.2
0.75 max.
(0.8)
15.6 ±0.5
0.45 +0.20 −0.10
2.0 ±0.2
0.45 +0.20 −0.10
0.7 ±0.1
2.54 ±0.15
(1.27)
(1.27)
1
2
3

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