

# 2SJ0164 (2SJ164)

## Silicon P-Channel Junction FET

For switching

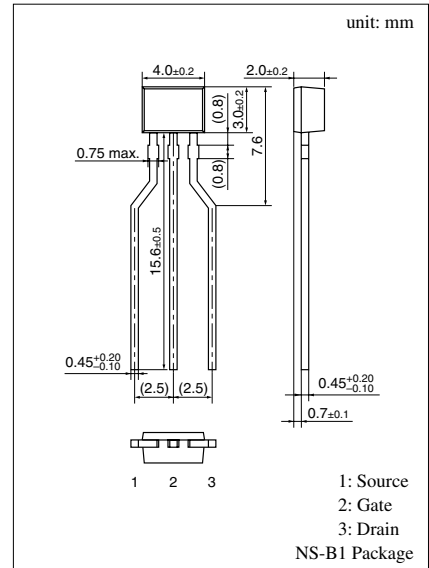
Complementary to 2SK1104

### ■ Features

- Low ON-resistance
- Low-noise characteristics

### ■ Absolute Maximum Ratings (Ta = 25°C)

Parameter	Symbol	Rated	Unit
Gate to Drain voltage	$V_{GDS}$	65	V
Drain current	$I_D$	-20	mA
Gate current	$I_G$	-10	mA
Allowable power dissipation	$P_D$	300	mW
Channel temperature	$T_{ch}$	150	°C
Storage temperature	$T_{stg}$	-55 to +150	°C



### ■ Electrical Characteristics (Ta = 25°C)

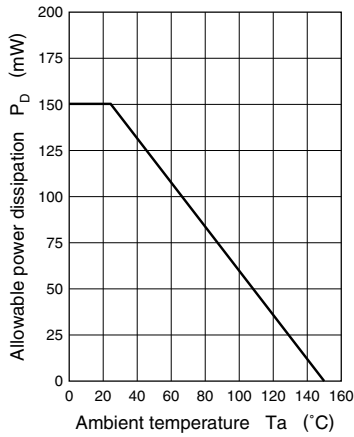
Parameter	Symbol	Conditions	min	typ	max	Unit
Drain to Source cut-off current	$I_{DSS}^*$	$V_{DS} = -10V, V_{GS} = 0$	-0.2		-6	mA
Gate to Source leakage current	$I_{GSS}$	$V_{GS} = 30V, V_{DS} = 0$			10	nA
Gate to Drain voltage	$V_{GDS}$	$I_G = 10\mu A, V_{DS} = 0$	65			V
Gate to Source cut-off voltage	$V_{GSC}$	$V_{DS} = -10V, I_D = -10\mu A$		1.5	3.5	V
Forward transfer admittance	$ Y_{fs} $	$V_{DS} = -10V, I_D = -1mA, f = 1kHz$	1.8	2.5		mS
Drain to Source ON-resistance	$R_{DS(on)}$	$V_{DS} = -10mV, V_{GS} = 0$		300		$\Omega$
Input capacitance (Common Source)	$C_{iss}$	$V_{DS} = -10V, V_{GS} = 0, f = 1MHz$		10		pF
Output capacitance (Common Source)	$C_{oss}$			3		pF
Reverse transfer capacitance (Common Source)	$C_{rss}$			3		pF

\*  $I_{DSS}$  rank classification

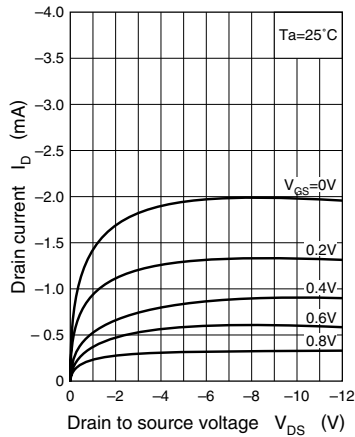
Rank	O	P	Q	R
$I_{DSS}$ (mA)	-0.2 to -1	-0.6 to -1.5	-1 to -3	-2.5 to -6

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

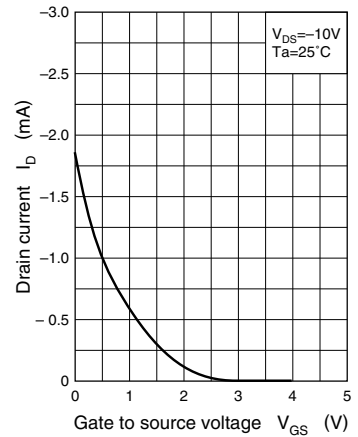
$P_D - T_a$



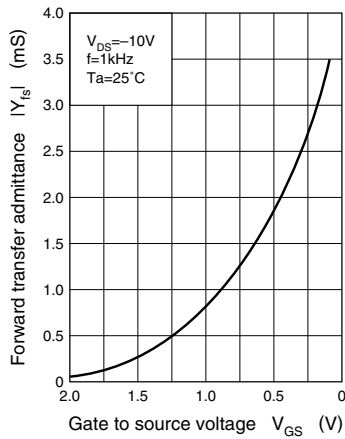
$I_D - V_{DS}$



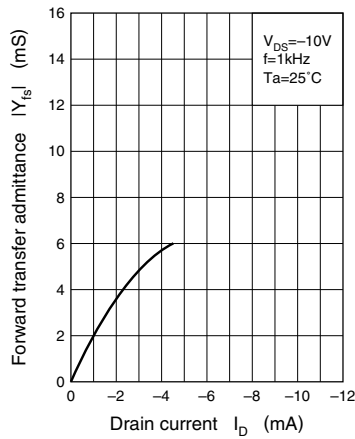
$I_D - V_{GS}$



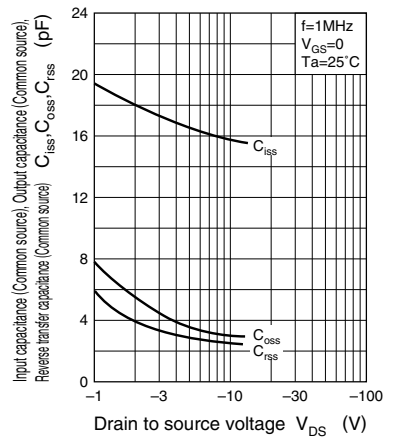
$|Y_{fs}| - V_{GS}$



$|Y_{fs}| - I_D$



$C_{iss}, C_{oss}, C_{rss} - V_{DS}$



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