

2SK1104

Silicon N-Channel Junction

For switching

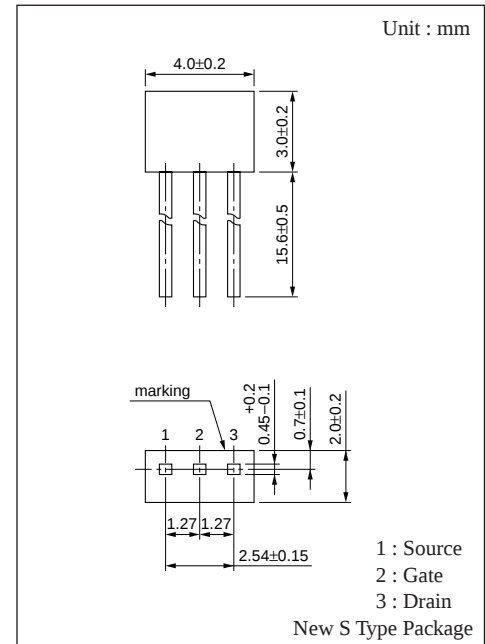
Complementary with 2SJ164

■ Features

- Low ON-resistance
- Low-noise characteristics

■ Absolute Maximum Ratings (Ta = 25°C)

Parameter	Symbol	Rating	Unit
Gate-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

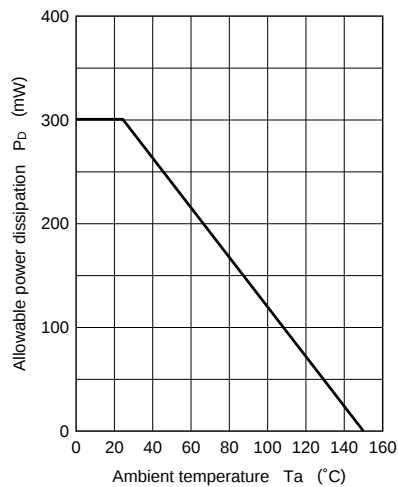
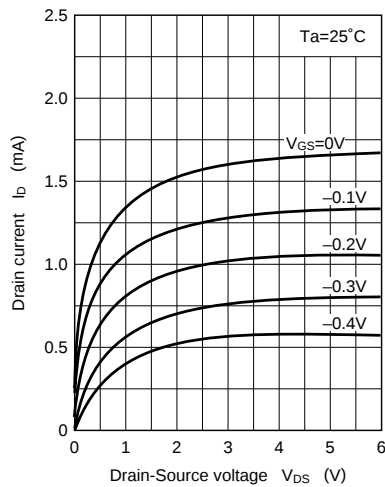
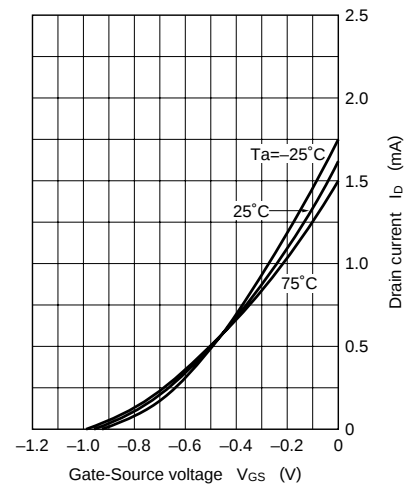
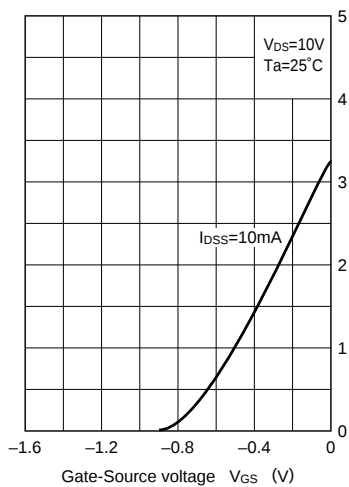
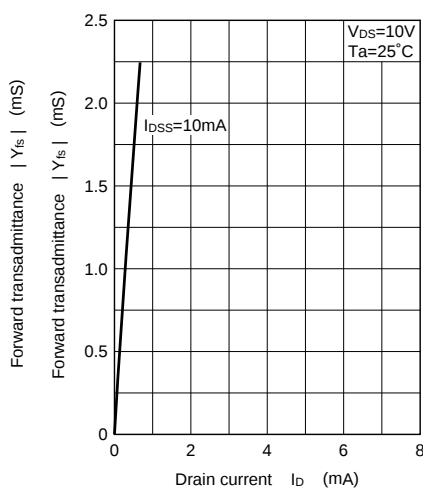


■ Electrical Characteristics (Ta = 25°C)

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Drain-Source cut-off current	I _{DSS} *	V _{DS} =10V, V _{GS} = 0	0.2		6	mA
Gate-Source leakage current	I _{GSS}	V _{GS} = − 30V, V _{DS} = 0			−10	nA
Gate-Drain voltage	V _{GDS}	I _G = −10μA, V _{DS} = 0	− 65			V
Gate-Source cut-off voltage	V _{GSC}	V _{DS} =10V, I _D =10μA		−1.5	− 3.5	V
Forward transadmittance	Y _{fs}	V _{DS} =10V, I _D =1mA, f=1kHz	1.8	2.5		mS
Drain-Source ON-resistance	R _{DS(ON)}	V _{DS} =10mV, V _{GS} = 0		250		Ω
Input capacitance	C _{iss}	V _{DS} =10V, V _{GS} = 0, f=1MHz		7		pF
Output capacitance	C _{oss}			1.3		pF
Feedback capacitance	C _{rss}			1.5		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

$P_D - T_a$  $I_D - V_{DS}$  $I_D - V_{GS}$  $|Y_{fs}| - V_{GS}$  $|Y_{fs}| - I_D$  $C_{iss}, C_{oss}, C_{rss} - V_{DS}$ 