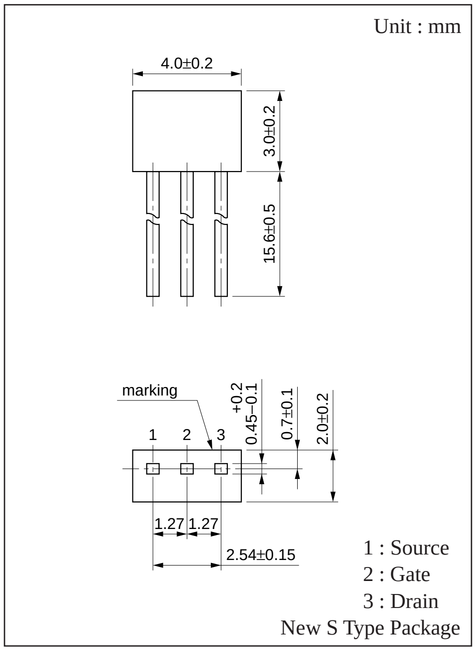
2SJ164

Silicon P-Channel Junction

For switching
Complementary with 2SK1104



■ 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

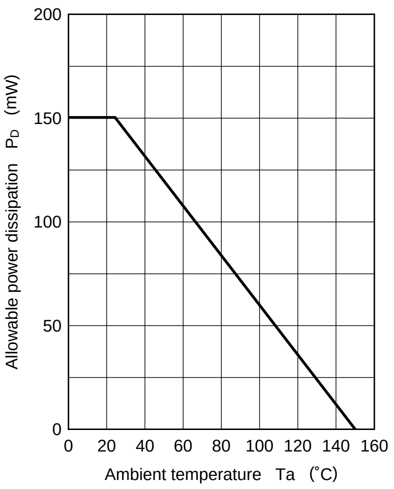
■ Electrical Characteristics (Ta = 25˚C)

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	$\vert Y_{fs} \vert$	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		300		Ω
Input capacitance	C_{iss}	V_{DS}=–10V, V_{GS}= 0, f=1MHz		10		pF
Output capacitance	C_{oss}			3		pF
Feedback capacitance	C_{rss}			3		pF

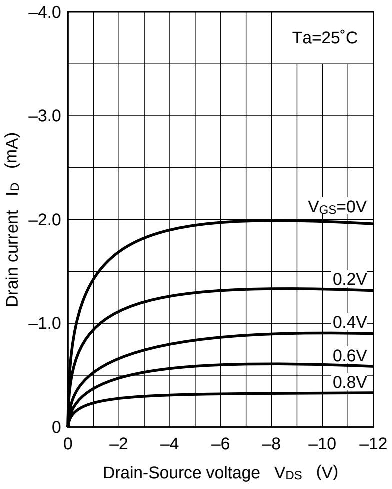
* I_{DSS} rank classification

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

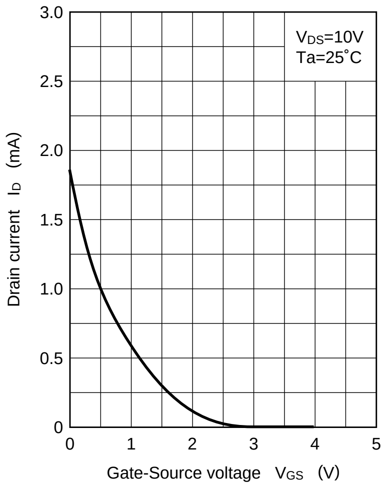
P_D – Ta



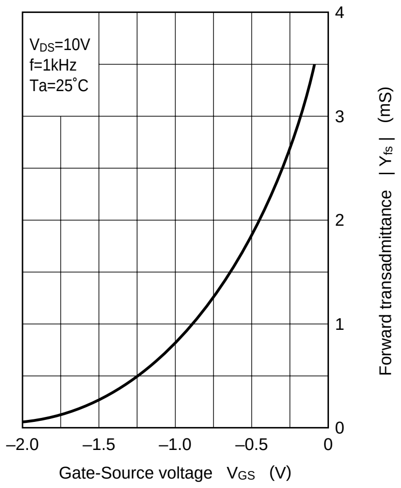
I_D – V_{DS}



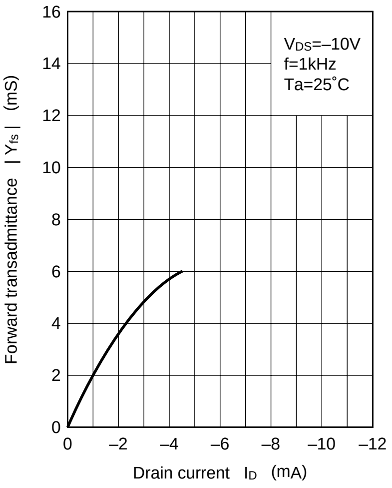
I_D – V_{GS}



|Y_{fs}| – V_{GS}



|Y_{fs}| – I_D



C_{iss}, C_{oss}, C_{rss} – V_{DS}