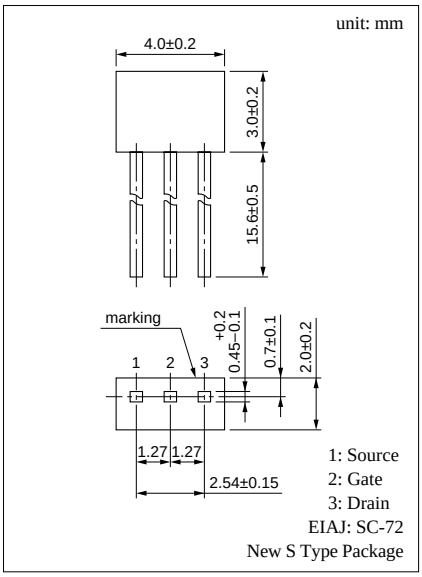
2SK1104

Silicon N-Channel Junction FET

For switching

Complementary to 2SJ164



■ Features

- Low ON-resistance
- Low-noise characteristics

■ Absolute Maximum Ratings (Ta = 25°C)

Parameter	Symbol	Ratings	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

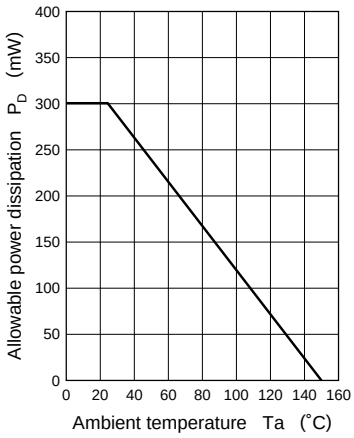
■ Electrical Characteristics (Ta = 25°C)

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 = −10μA, V_{DS} = 0	−65			V
Gate to Source cut-off voltage	V_{GSC}	V_{DS} = 10V, I_D = 10μA		−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		250		Ω
Input capacitance (Common Source)	C_{iss}	V_{DS} = 10V, V_{GS} = 0, f = 1MHz		7		pF
Output capacitance (Common Source)	C_{oss}			1.3		pF
Reverse transfer capacitance (Common Source)	C_{rss}			1.5		pF

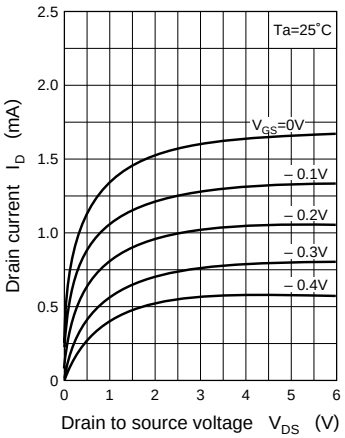
* I_{DSS} rank classification

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

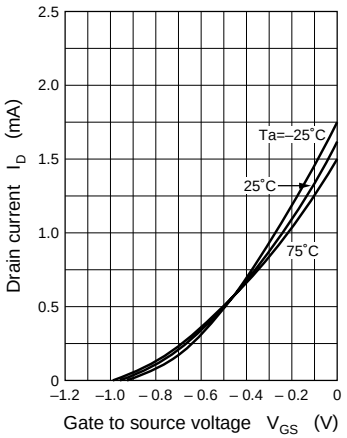
P_D — Ta



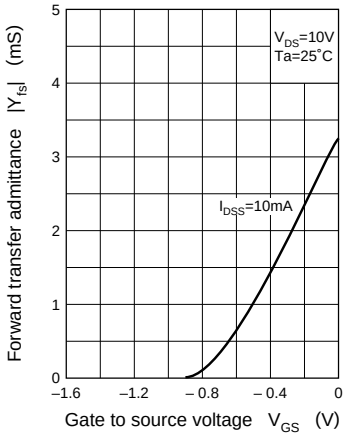
I_D — V_{DS}



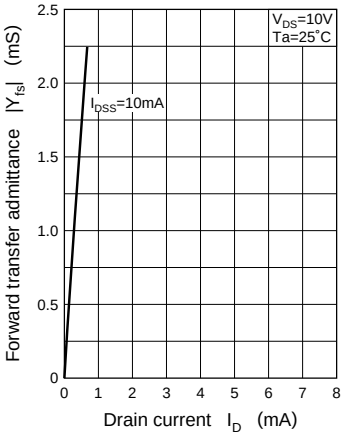
I_D — V_{GS}



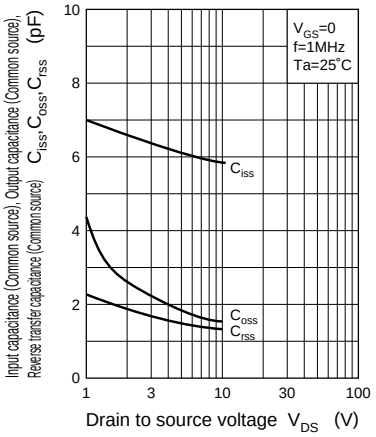
$|Y_{fs}|$ — V_{GS}



$|Y_{fs}|$ — I_D



C_{iss}, C_{oss}, C_{rss} — V_{DS}



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