

# 2SK1103

## Silicon N-Channel Junction FET

For switching

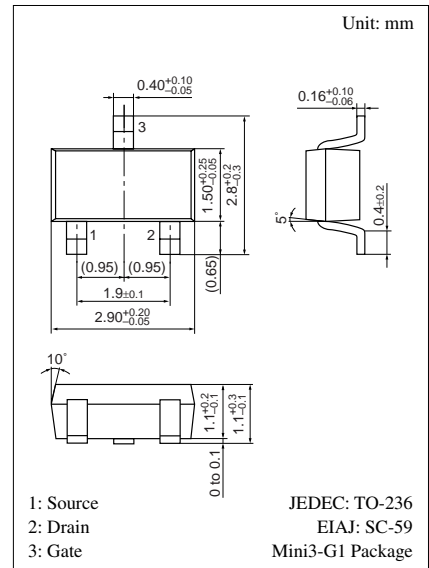
Complementary to 2SJ0163 (2SJ163)

### ■ Features

- Low ON-resistance
- Low-noise characteristics

### ■ Absolute Maximum Ratings (T<sub>a</sub> = 25°C)

Parameter	Symbol	Ratings	Unit
Gate to Drain voltage	V <sub>GDS</sub>	-65	V
Drain current	I <sub>D</sub>	20	mA
Gate current	I <sub>G</sub>	10	mA
Allowable power dissipation	P <sub>D</sub>	150	mW
Channel temperature	T <sub>ch</sub>	150	°C
Storage temperature	T <sub>stg</sub>	-55 to +150	°C



Marking Symbol (Example): 4L

### ■ Electrical Characteristics (T<sub>a</sub> = 25°C)

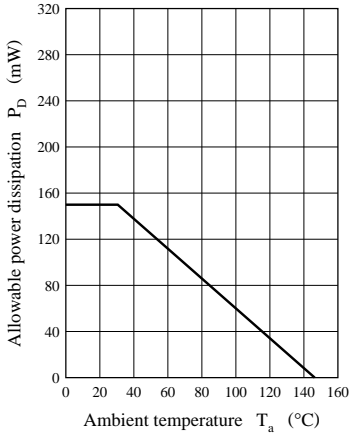
Parameter	Symbol	Conditions	min	typ	max	Unit
Drain to Source cut-off current	I <sub>DSS</sub> *	V <sub>DS</sub> = 10 V, V <sub>GS</sub> = 0	0.2		6	mA
Gate to Source leakage current	I <sub>GSS</sub>	V <sub>GS</sub> = -30 V, V <sub>DS</sub> = 0			-10	nA
Gate to Drain voltage	V <sub>GDS</sub>	I <sub>G</sub> = -10 μA, V <sub>DS</sub> = 0	-65			V
Gate to Source cut-off voltage	V <sub>GSC</sub>	V <sub>DS</sub> = 10 V, I <sub>D</sub> = 10 μA		-1.5	-3.5	V
Forward transfer admittance	Y <sub>fs</sub>	V <sub>DS</sub> = 10 V, I <sub>D</sub> = 1 mA, f = 1 kHz	1.8	2.5		mS
Drain to Source ON-resistance	R <sub>DS(on)</sub>	V <sub>DS</sub> = 10 mV, V <sub>GS</sub> = 0		300		Ω
Input capacitance (Common Source)	C <sub>iss</sub>	V <sub>DS</sub> = 10 V, V <sub>GS</sub> = 0, f = 1 MHz		7		pF
Reverse transfer capacitance (Common Source)	C <sub>rss</sub>			1.5		pF

\* I<sub>DSS</sub> rank classification

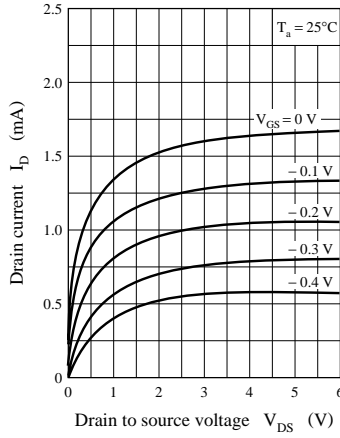
Runk	O	P	Q	R
I <sub>DSS</sub> (mA)	0.2 to 1	0.6 to 1.5	1 to 3	2.5 to 6
Marking Symbol	4LO	4LP	4LQ	4LR

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

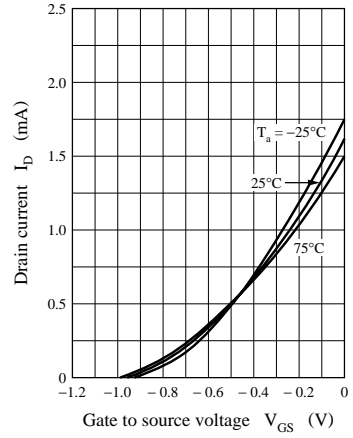
$P_D - T_a$



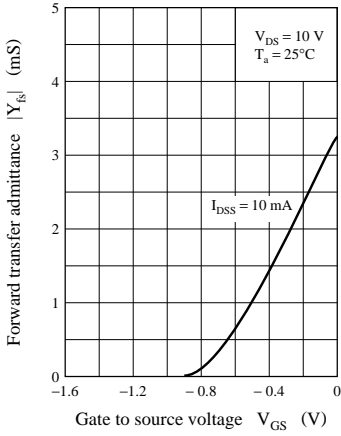
$I_D - V_{DS}$



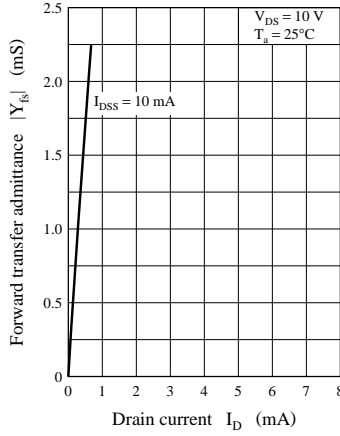
$I_D - V_{GS}$



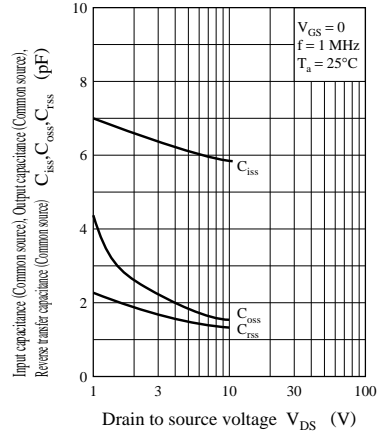
$|Y_{fs}| - V_{GS}$



$|Y_{fs}| - I_D$



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



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