2SK1103

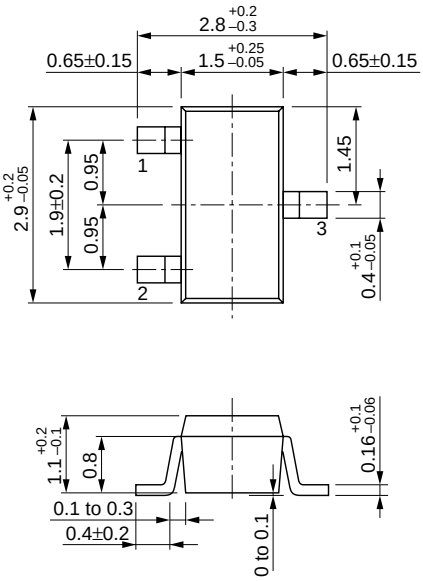
Silicon N-Channel Junction

For switching
Complementary with 2SJ163

■ Features

- Low ON-resistance
- Low-noise characteristics

Unit : mm



1 : Source
2 : Drain
3 : Gate

JEDEC : TO-236
EIAJ : SC-59
Mini Type Package (3-pin)

■ 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	150	mW
Channel temperature	T_{ch}	150	˚C
Storage temperature	T_{stg}	– 55 to +150	˚C

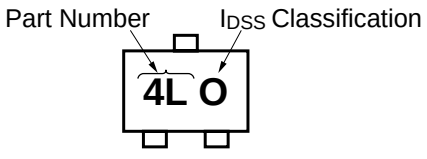
■ Electrical Characteristics (Ta = 25˚C)

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Drain-Source cut-off current	IDSS *	V_{DS}=10V, V_{GS}= 0	0.2		6	mA
Gate-Source leakage current	IGSS	V_{GS}= –30V, V_{DS}= 0			–10	nA
Gate-Drain voltage	VGDS	I_G= –10µA, V_{DS}= 0	– 65			V
Gate-Source cut-off voltage	VGSC	V_{DS}=10V, I_D=10µA		–1.5	– 3.5	V
Forward transadmittance	| Yfs |	V_{DS}=10V, I_D=1mA, f=1kHz	1.8	2.5		mS
Drain-Source ON-resistance	RDS(ON)	V_{DS}=10mV, V_{GS}= 0		300		Ω
Input capacitance	Ciss	V_{DS}=10V, V_{GS}= 0, f=1MHz		7		pF
Output capacitance	Coss			1.5		pF
Feedback capacitance	Crss			1.5		pF

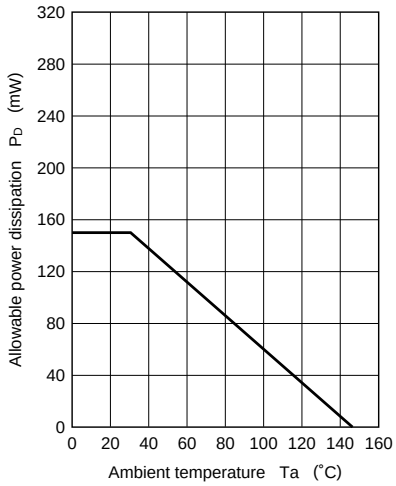
* I_{DSS} rank classification

Rank	O	P	Q	R
I_{DSS}(mA)	0.2 to 1	0.6 to 1.5	1 to 3	2.5 to 6
Part number symbol	4LO	4LP	4LQ	4LR

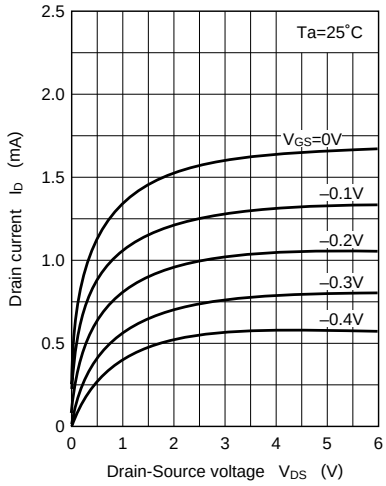
■ Marking (Example)



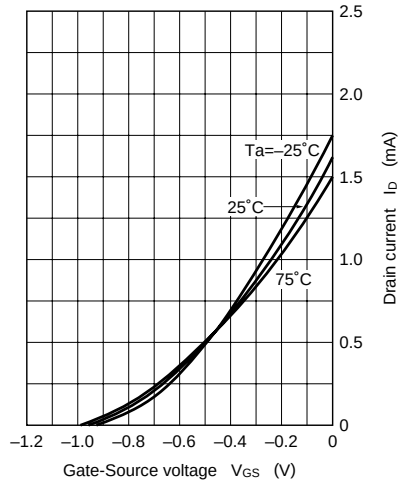
$P_D - Ta$



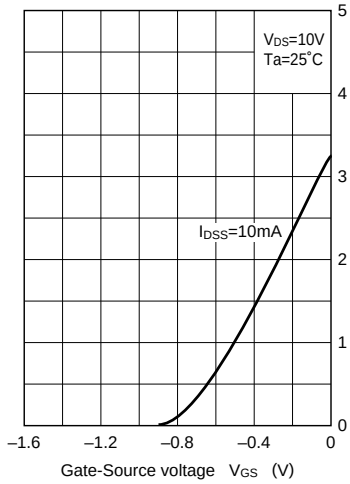
$I_D - V_{DS}$



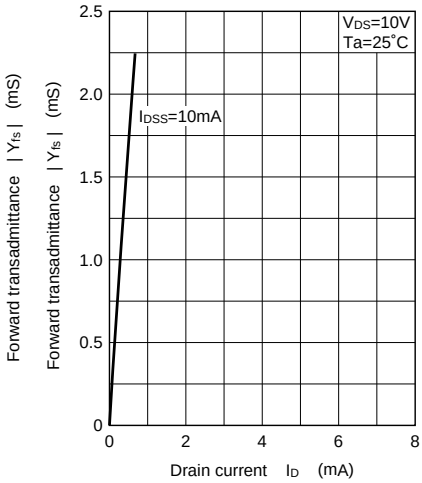
$I_D - V_{GS}$



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



$|Y_{fs}| - I_D$



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