

# 2SJ163

## Silicon P-Channel Junction

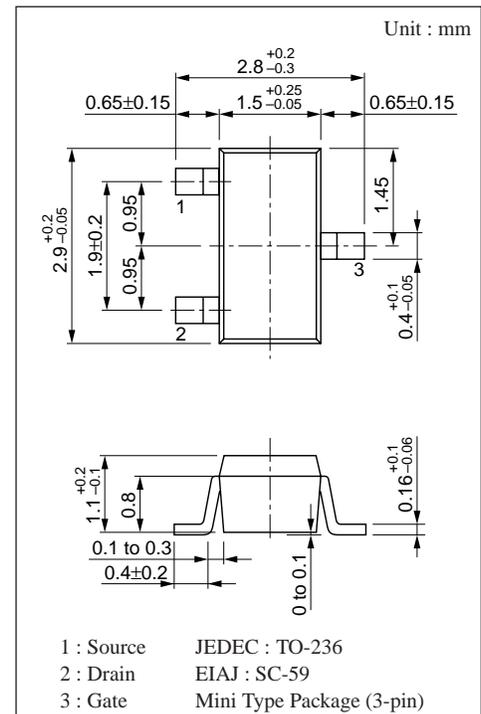
For general use switching  
Complementary with 2SK1103

### ■ Features

- Low ON-resistance
- Low-noise characteristics

### ■ Absolute Maximum Ratings (Ta = 25°C)

Parameter	Symbol	Rating	Unit
Gate-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



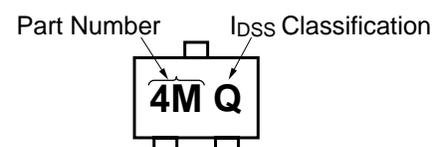
### ■ Electrical Characteristics (Ta = 25°C)

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Drain-Source cut-off current	I <sub>DSS</sub> *	V <sub>DS</sub> =-10V, V <sub>GS</sub> =0	-0.2		-6	mA
Gate-Source leakage current	I <sub>GSS</sub>	V <sub>GS</sub> =30V, V <sub>DS</sub> =0			10	nA
Gate-Drain voltage	V <sub>GDS</sub>	I <sub>G</sub> =10μA, V <sub>DS</sub> =0	65			V
Gate-Source cut-off voltage	V <sub>GSC</sub>	V <sub>DS</sub> =-10V, I <sub>D</sub> =-10μA		1.5	3.5	V
Forward transadmittance	Y <sub>fs</sub>	V <sub>DS</sub> =-10V, I <sub>D</sub> =-1mA, f=1kHz	1.8	2.5		mS
Drain-Source ON-resistance	R <sub>DS(ON)</sub>	V <sub>DS</sub> =-10mV, V <sub>GS</sub> =0		300		Ω
Input capacitance	C <sub>iss</sub>	V <sub>DS</sub> =-10V, V <sub>GS</sub> =0, f=1MHz		12		pF
Output capacitance	C <sub>oss</sub>			4		pF
Feedback capacitance	C <sub>rss</sub>			4		pF

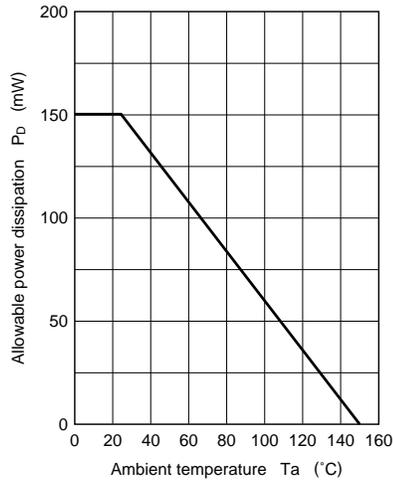
\* I<sub>DSS</sub> rank classification

Rank	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
Part number symbol	4MO	4MP	4MQ	4MR

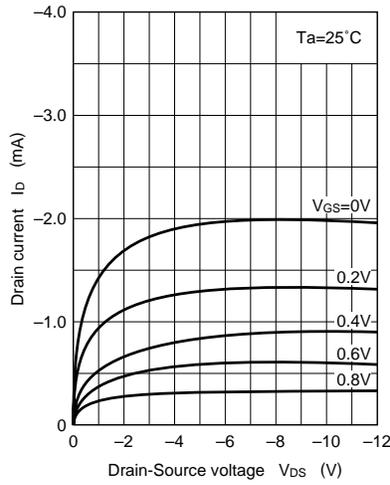
### ■ Marking (Example)



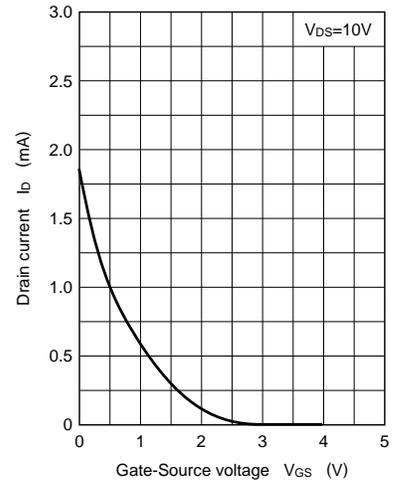
$P_D - T_a$



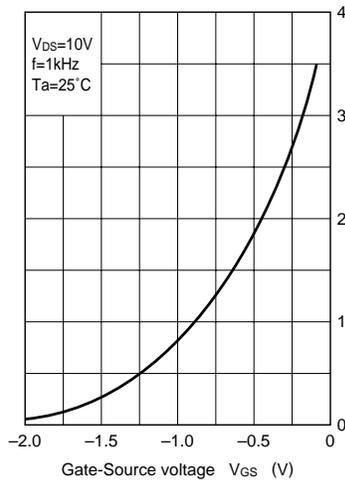
$I_D - V_{DS}$



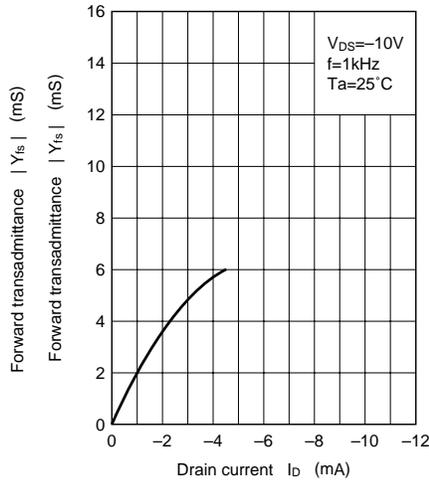
$I_D - V_{GS}$



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



$|Y_{fs}| - I_D$



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

