

2SJ0163 (2SJ163)

Silicon P-Channel Junction FET

For general switching

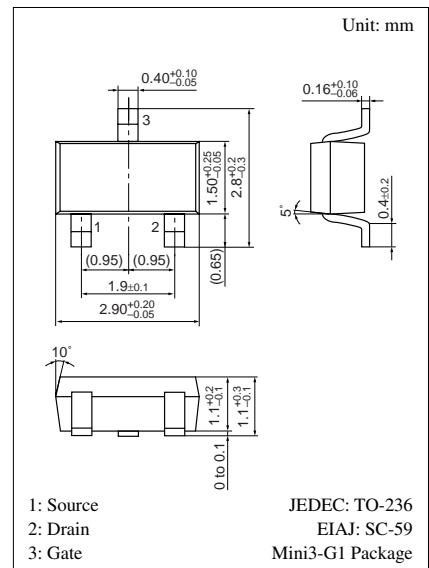
Complementary to 2SK1103

■ Features

- Low ON-resistance
- Low-noise characteristics

■ Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Rated	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}	150	mW
Channel temperature	T_{ch}	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$



Marking Symbol (Example): 4M

■ Electrical Characteristics ($T_a = 25^\circ\text{C}$)

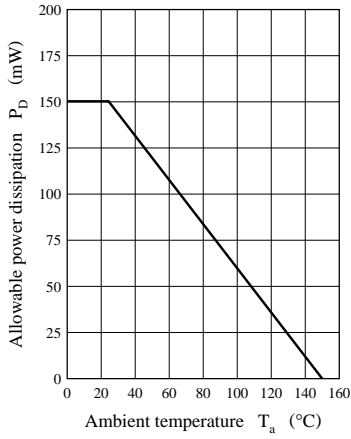
Parameter	Symbol	Conditions	min	typ	max	Unit
Drain to Source cut-off current	I_{DSS}^*	$V_{\text{DS}} = -10\text{ V}, V_{\text{GS}} = 0$	-0.2		-6	mA
Gate to Source leakage current	I_{GSS}	$V_{\text{GS}} = 30\text{ V}, V_{\text{DS}} = 0$			10	nA
Gate to Drain voltage	V_{GDS}	$I_{\text{G}} = 10\ \mu\text{A}, V_{\text{DS}} = 0$	65			V
Gate to Source cut-off voltage	V_{GSC}	$V_{\text{DS}} = -10\text{ V}, I_{\text{D}} = -10\ \mu\text{A}$		1.5	3.5	V
Forward transfer admittance	$ Y_{\text{fs}} $	$V_{\text{DS}} = -10\text{ V}, I_{\text{D}} = -1\text{ mA}, f = 1\text{ kHz}$	1.8	2.5		mS
Drain to Source ON-resistance	$R_{\text{DS(on)}}$	$V_{\text{DS}} = -10\text{ mV}, V_{\text{GS}} = 0$		300		Ω
Input capacitance (Common Source)	C_{iss}	$V_{\text{DS}} = -10\text{ V}, V_{\text{GS}} = 0, f = 1\text{ MHz}$		12		pF
Reverse transfer capacitance (Common Source)	C_{rss}			4		pF

* I_{DSS} rank classification

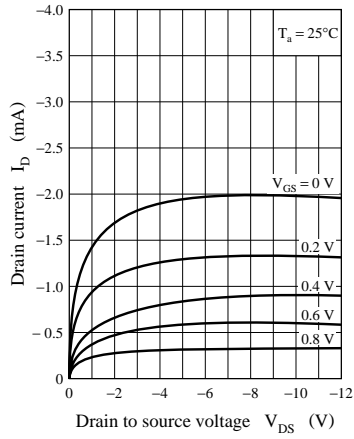
Rank	O	P	Q	R
I_{DSS} (mA)	-0.2 to -1	-0.6 to -1.5	-1 to -3	-2.5 to -6
Marking Symbol	4MO	4MP	4MQ	4MR

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

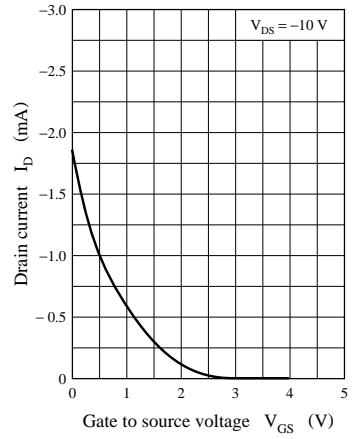
$P_D - T_a$



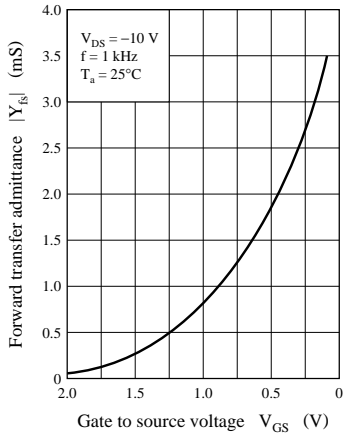
$I_D - V_{DS}$



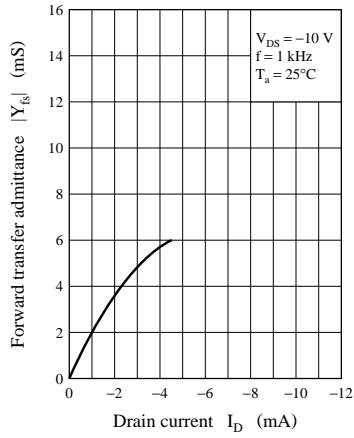
$I_D - V_{GS}$



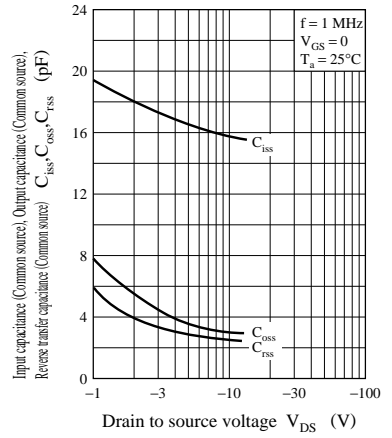
$|Y_{fs}| - V_{GS}$



$|Y_{fs}| - I_D$



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



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