

# 2SJ0163 (2SJ163)

## Silicon P-Channel Junction FET

For general switching

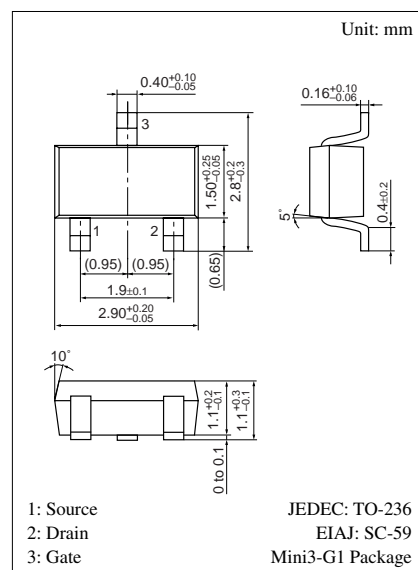
Complementary to 2SK1103

### ■ Features

- Low ON-resistance
- Low-noise characteristics

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

Parameter	Symbol	Ratings	Unit
Gate to Drain voltage	$V_{\text{GDS}}$	65	V
Drain current	$I_{\text{D}}$	−20	mA
Gate current	$I_{\text{G}}$	−10	mA
Allowable power dissipation	$P_{\text{D}}$	150	mW
Channel temperature	$T_{\text{ch}}$	150	$^\circ\text{C}$
Storage temperature	$T_{\text{stg}}$	−55 to +150	$^\circ\text{C}$



Marking Symbol (Example): 4M

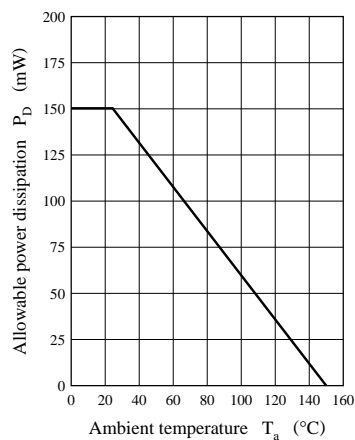
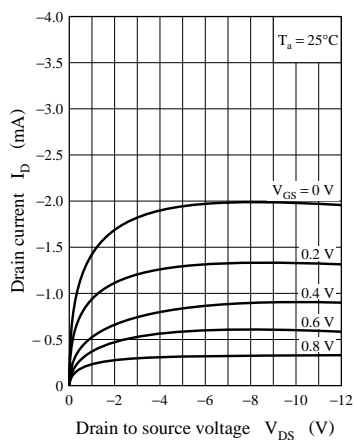
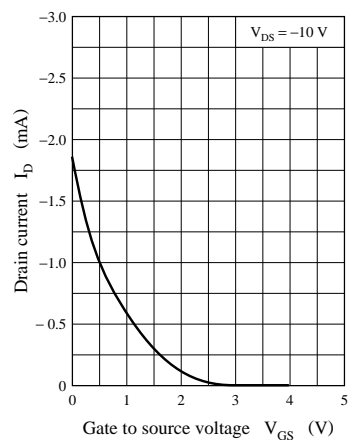
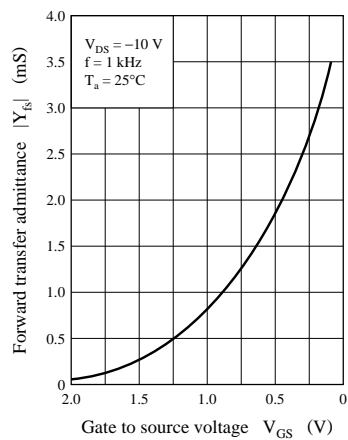
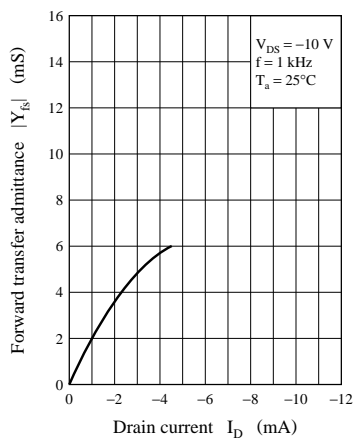
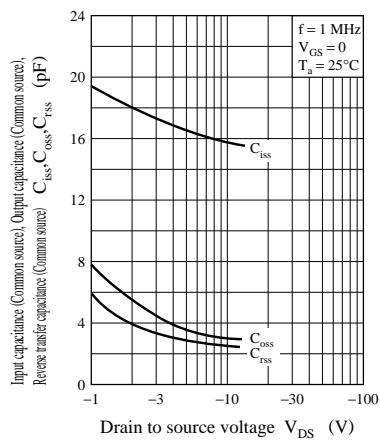
### ■ Electrical Characteristics ( $T_a = 25^\circ\text{C}$ )

Parameter	Symbol	Conditions	min	typ	max	Unit
Drain to Source cut-off current	$I_{\text{DSS}}^*$	$V_{\text{DS}} = -10\text{ V}, V_{\text{GS}} = 0$	−0.2		−6	mA
Gate to Source leakage current	$I_{\text{GSS}}$	$V_{\text{GS}} = 30\text{ V}, V_{\text{DS}} = 0$			10	nA
Gate to Drain voltage	$V_{\text{GDS}}$	$I_{\text{G}} = 10\text{ }\mu\text{A}, V_{\text{DS}} = 0$	65			V
Gate to Source cut-off voltage	$V_{\text{GSC}}$	$V_{\text{DS}} = -10\text{ V}, I_{\text{D}} = -10\text{ }\mu\text{A}$		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		$\Omega$
Input capacitance (Common Source)	$C_{\text{iss}}$	$V_{\text{DS}} = -10\text{ V}, V_{\text{GS}} = 0, f = 1\text{ MHz}$		12		pF
Reverse transfer capacitance (Common Source)	$C_{\text{rss}}$			4		pF

\*  $I_{\text{DSS}}$  rank classification

Runk	O	P	Q	R
$I_{\text{DSS}}$ (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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