

# 2SK1103

## Silicon N-channel junction FET

For switching circuits

Complementary to 2SJ0163

### ■ Features

- Low ON resistance
- Low-noise characteristics

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

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

### ■ Package

- Code  
Mini3-G1
- Pin Name  
1: Source  
2: Drain  
3: Gate

### ■ Marking Symbol: 4L

### ■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

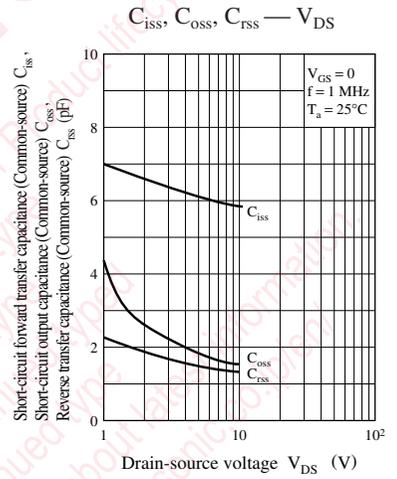
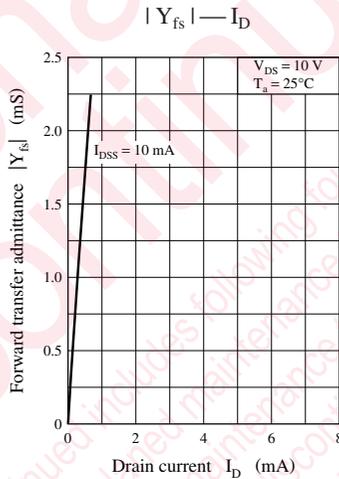
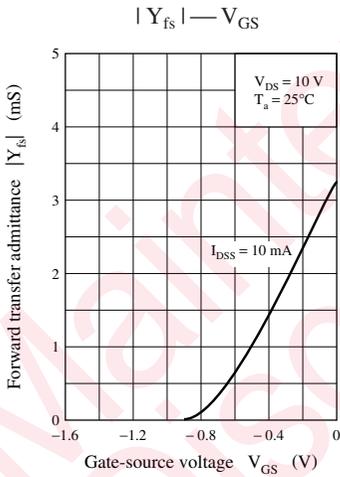
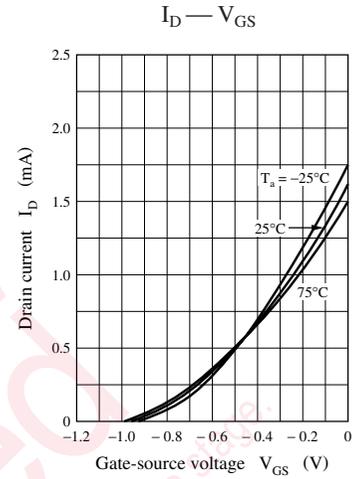
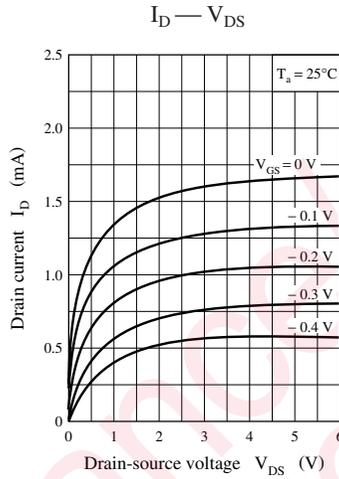
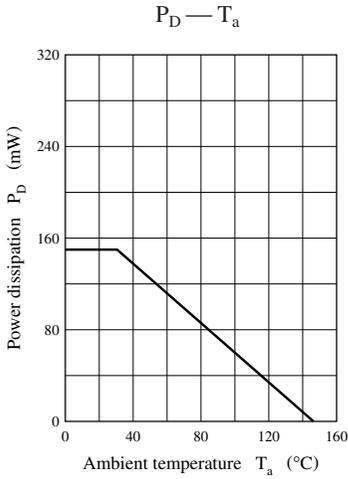
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Gate-drain surrender voltage	$V_{\text{GDS}}$	$I_{\text{G}} = -10 \mu\text{A}$ , $V_{\text{DS}} = 0$	-65			V
Drain-source current *	$I_{\text{DSS}}$	$V_{\text{DS}} = 10 \text{ V}$ , $V_{\text{GS}} = 0$	0.6		6.0	mA
Gate-source cutoff current	$I_{\text{GSS}}$	$V_{\text{GS}} = -30 \text{ V}$ , $V_{\text{DS}} = 0$			-10	nA
Gate-source cutoff voltage	$V_{\text{GSC}}$	$V_{\text{DS}} = 10 \text{ V}$ , $I_{\text{D}} = 10 \mu\text{A}$		-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-source ON resistance	$R_{\text{DS(on)}}$	$V_{\text{DS}} = 10 \text{ mV}$ , $V_{\text{GS}} = 0$		300		$\Omega$
Short-circuit forward transfer capacitance (Common source)	$C_{\text{iss}}$	$V_{\text{DS}} = 10 \text{ V}$ , $V_{\text{GS}} = 0$ , $f = 1 \text{ MHz}$		7		pF
Reverse transfer capacitance (Common source)	$C_{\text{rss}}$			1.5		pF

Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

2. Observe precautions for handling. Electrostatic sensitive devices.

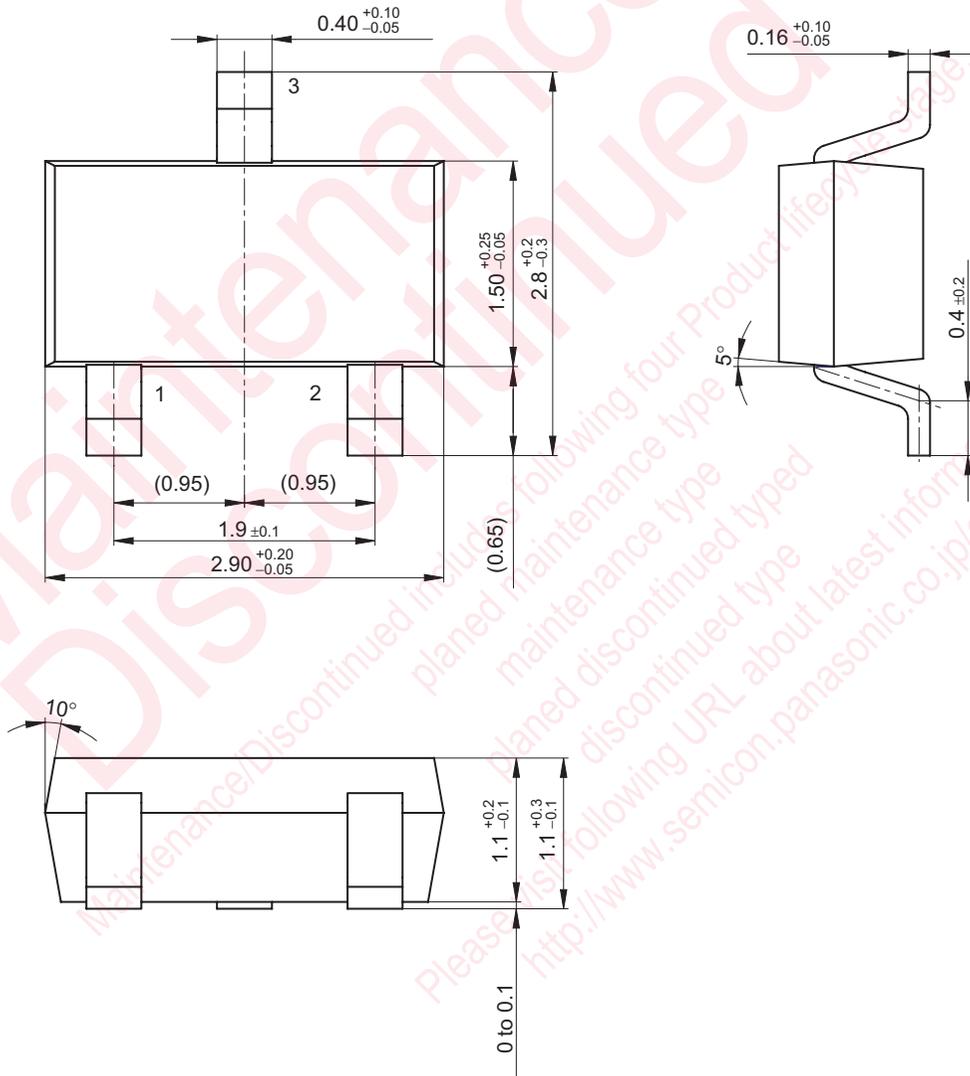
3. \*: Rank classification

Rank	P	Q	R
$I_{\text{DSS}}$ (mA)	0.6 to 1.5	1.0 to 3.0	2.5 to 6.0



Mini3-G1

Unit: mm



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