

2SK0663 (2SK663)

Silicon N-channel junction FET

For low-frequency amplification

For switching circuits

■ Features

- Low noise figure NF
- High gate-drain voltage (source open) V_{GDO}
- SMini type package, allowing downsizing of the sets and automatic insertion through the tape/magazine packing

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

Parameter	Symbol	Rating	Unit
Drain-source voltage	V_{DS}	55	V
Gate-drain voltage (Source open)	V_{GDO}	-55	V
Gate-source voltage (Drain open)	V_{GSO}	-55	V
Drain current	I_D	30	mA
Gate current	I_G	10	mA
Power dissipation	P_D	150	mW
Channel temperature	T_{ch}	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

■ Package

- Code
SMini3-G1
- Pin Name
1: Source
2: Drain
3: Gate

■ Marking Symbol: 2B

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

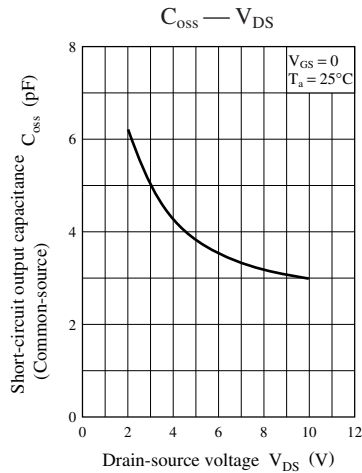
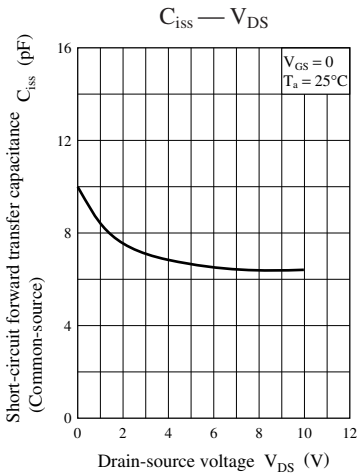
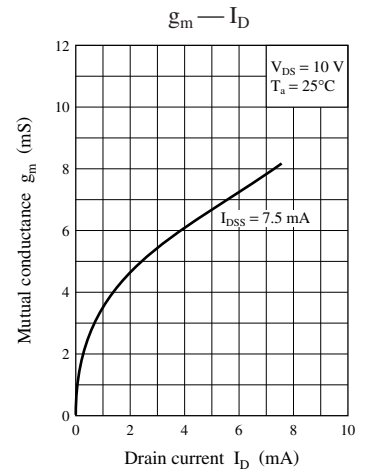
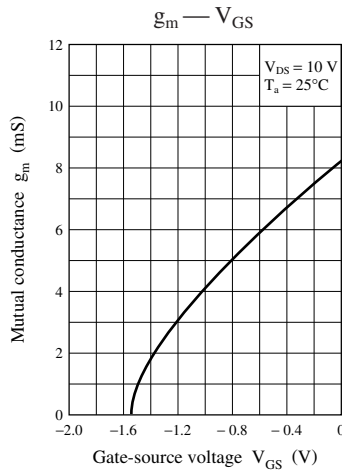
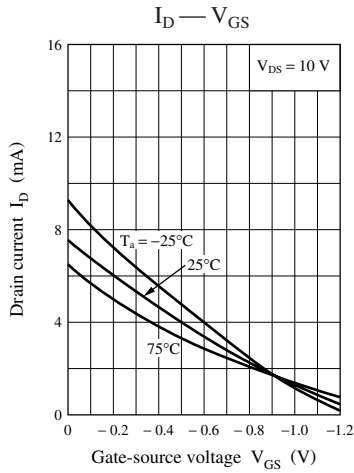
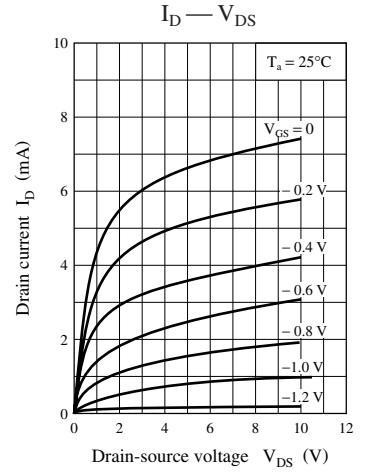
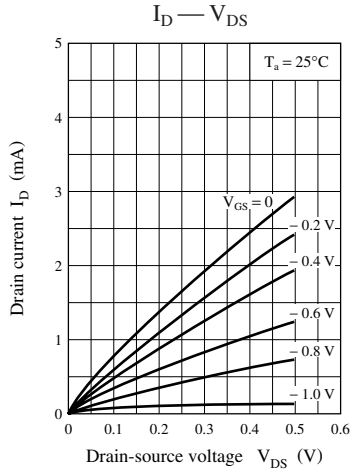
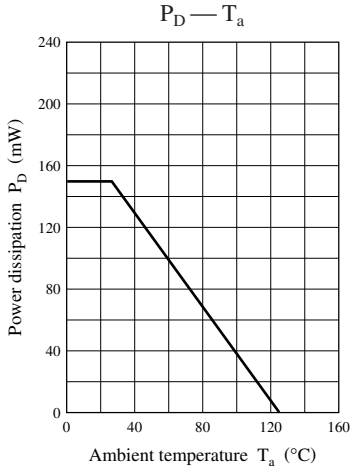
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Gate-drain surrender voltage	V_{GDS}	$I_G = -100 \mu\text{A}$, $V_{DS} = 0$	55	80		V
Drain-source current *	I_{DSS}	$V_{DS} = 10 \text{ V}$, $V_{GS} = 0$	1.0		12.0	mA
Gate-source cutoff current	I_{GSS}	$V_{GS} = -30 \text{ V}$, $V_{DS} = 0$			-10	nA
Gate-source cutoff voltage	V_{GSC}	$V_{DS} = 10 \text{ V}$, $I_D = 10 \mu\text{A}$			-5	V
Forward transfer admittance	$ Y_{fs} $	$V_{DS} = 10 \text{ V}$, $I_D = 5 \text{ mA}$, $f = 1 \text{ kHz}$	2.5	7.5		mS
Short-circuit forward transfer capacitance (Common source)	C_{iss}	$V_{DS} = 10 \text{ V}$, $V_{GS} = 0$, $f = 1 \text{ MHz}$		6.5		pF
Reverse transfer capacitance (Common source)	C_{rss}			1.9		pF
Noise figure	NF	$V_{DS} = 10 \text{ V}$, $V_{GS} = 0$, $f = 100 \text{ Hz}$ $R_g = 100 \text{ k}\Omega$		2.5		dB

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

2. *: Rank classification

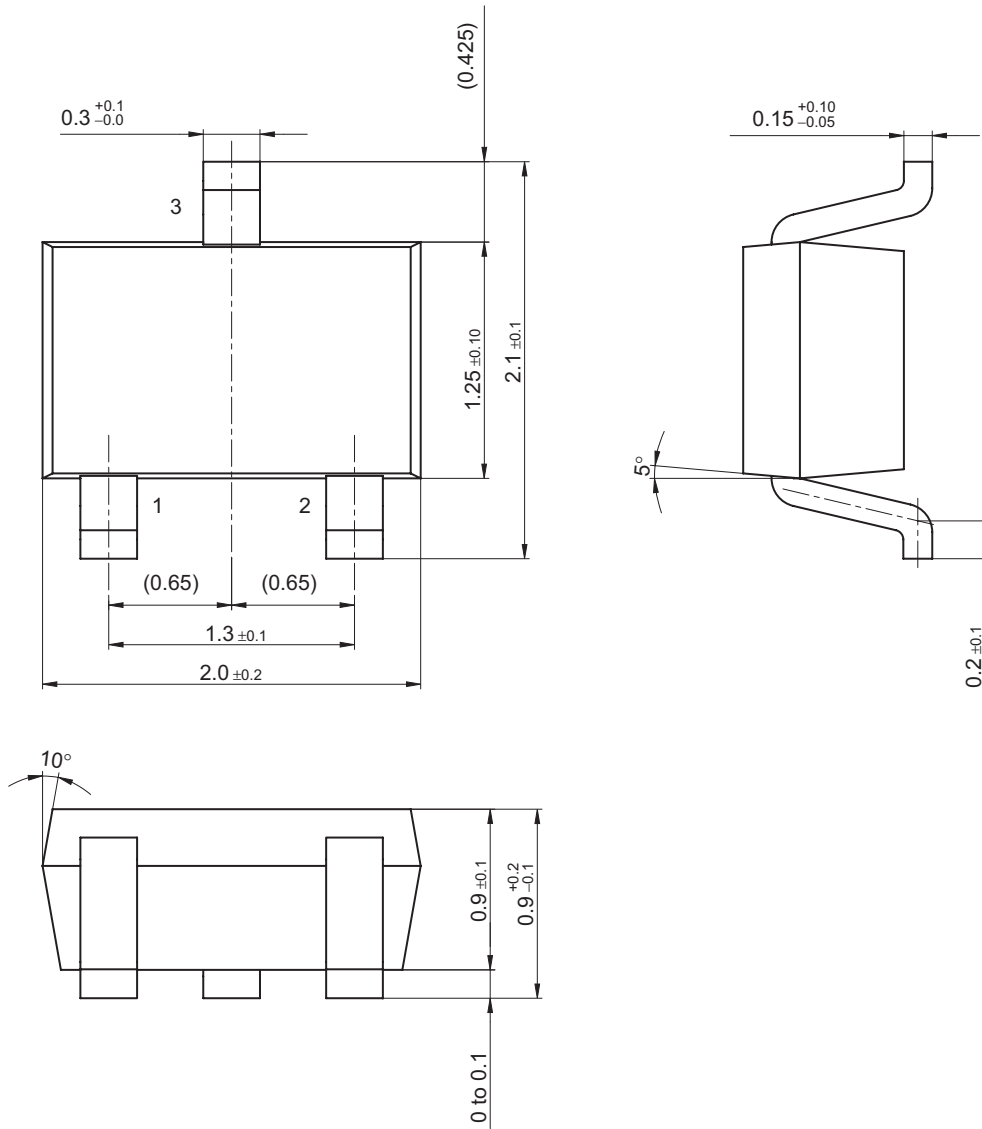
Rank	P	Q	R
I_{DSS} (mA)	1.0 to 3.0	2.0 to 6.5	5.0 to 12.0

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



SMini3-G1

Unit: mm



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