# 2SK0663 (2SK663)

### Silicon N-Channel Junction FET

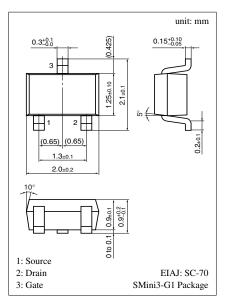
For low-frequency amplification For switching

#### Features

- Low noise-figure (NF)
- High gate to drain voltage V<sub>GDO</sub>
- S-mini type package, allowing downsizing of the sets and automatic insertion through the tape/magazine packing.

Absolute Maximum Hatings $(1a = 25^{\circ}C)$							
Symbol	Ratings	Unit					
V <sub>DSX</sub>	55	V					
V <sub>GDO</sub>	-55	V					
V <sub>GSO</sub>	-55	V					
I <sub>D</sub>	30	mA					
I <sub>G</sub>	10	mA					
P <sub>D</sub>	150	mW					
Tj	125	°C					
T <sub>stg</sub>	-55 to +125	°C					
	$\begin{tabular}{lllllllllllllllllllllllllllllllllll$	$\begin{tabular}{ c c c c } \hline Symbol & Ratings \\ \hline Symbol & Ratings \\ \hline V_{DSX} & 55 \\ \hline V_{GDO} & -55 \\ \hline V_{GSO} & -55 \\ \hline I_D & 30 \\ \hline I_G & 10 \\ \hline P_D & 150 \\ \hline T_j & 125 \\ \hline \end{tabular}$					

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



#### Marking Symbol (Example): 2B

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

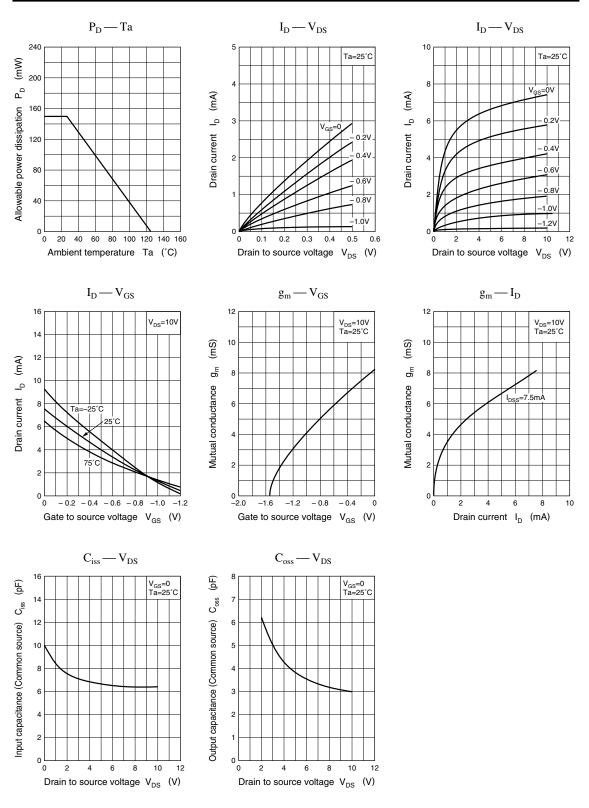
Parameter	Symbol	Conditions	min	typ	max	Unit
Drain to Source cut-off current	I <sub>DSS</sub> *	$V_{DS} = 10V, V_{GS} = 0$	1		12	mA
Gate to Source leakage current	I <sub>GSS</sub>	$V_{GS} = -30V, V_{DS} = 0$			-10	nA
Gate to Drain voltage	V <sub>GDS</sub>	$I_{G} = 100 \mu A, V_{DS} = 0$	55	80		V
Gate to Source cut-off voltage	V <sub>GSC</sub>	$V_{DS} = 10V, I_D = 10\mu A$			-5	V
Mutual conductance	g <sub>m</sub>	$V_{DS} = 10V, I_D = 5mA, f = 1kHz$	2.5	7.5		mS
Input capacitance (Common Source)	C <sub>iss</sub>			6.5		pF
Reverse transfer capacitance (Common Source)	C <sub>rss</sub>	$V_{DS} = 10V, V_{GS} = 0, f = 1MHz$		1.9		pF
Noise figure	NF	$V_{DS} = 10V, V_{GS} = 0, R_g = 100k\Omega$ $f = 100Hz$		2.5		dB

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

Runk	Р	Q	R
I <sub>DSS</sub> (mA)	1 to 3	2 to 6.5	5 to 12
Marking Symbol	2BP	2BQ	2BR

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

### Silicon Junction FETs (Small Signal)



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