

# 2SK2751

## Silicon N-Channel Junction FET

For impedance conversion in low frequency

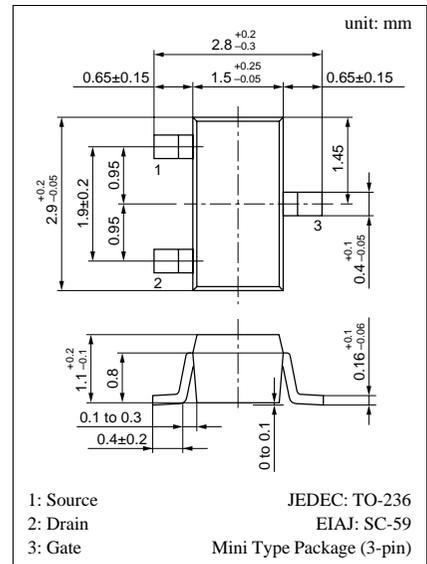
For pyroelectric sensor

### ■ Features

- Low noise-figure (NF)
- High gate to drain voltage  $V_{GDS}$
- Mini-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	Ratings	Unit
Gate to Drain voltage	$V_{GDS}$	-40	V
Drain current	$I_D$	10	mA
Gate current	$I_G$	2	mA
Allowable power dissipation	$P_D$	200	mW
Channel temperature	$T_{ch}$	150	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-55 to +150	$^\circ\text{C}$



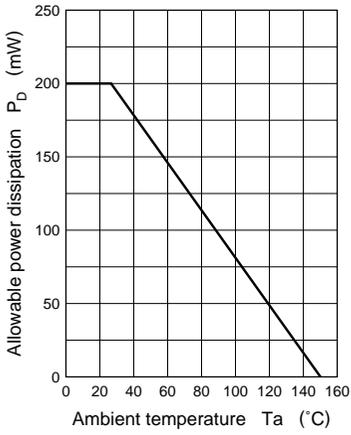
Marking Symbol: HS

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

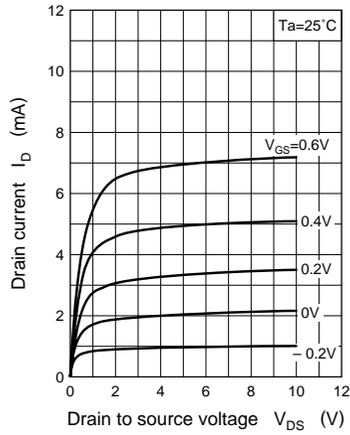
Parameter	Symbol	Conditions	min	typ	max	Unit
Drain to Source cut-off current	$I_{DSS}$	$V_{DS} = 10\text{V}, V_{GS} = 0$	1.4		4.7	mA
Gate to Source leakage current	$I_{GSS}$	$V_{GS} = -20\text{V}, V_{DS} = 0$			-1	nA
Gate to Drain voltage	$V_{GDS}$	$I_G = -100\mu\text{A}, V_{DS} = 0$	-40			V
Gate to Source cut-off voltage	$V_{GSC}$	$V_{DS} = 10\text{V}, I_D = 1\mu\text{A}$			-3.5	V
Forward transfer admittance	$ Y_{fs} $	$V_{DS} = 10\text{V}, I_D = 1\mu\text{A}, f = 1\text{kHz}$	2.5			mS
Input capacitance (Common Source)	$C_{iss}$	$V_{DS} = 10\text{V}, V_{GS} = 0, f = 1\text{MHz}$		5		pF
Output capacitance (Common Source)	$C_{oss}$			1		pF
Reverse transfer capacitance (Common Source)	$C_{rss}$			1		pF

Note: The test method to comply with JISC7030, Field effect transistor test method.

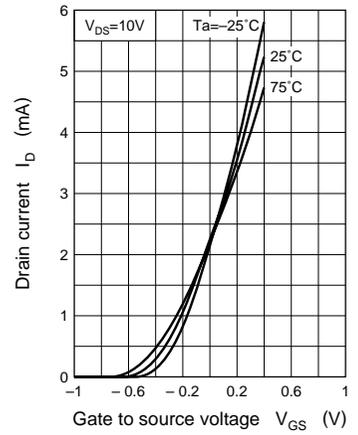
$P_D - T_a$



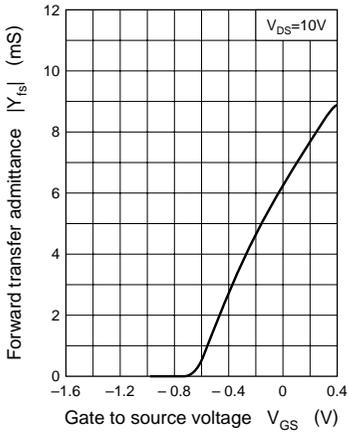
$I_D - V_{DS}$



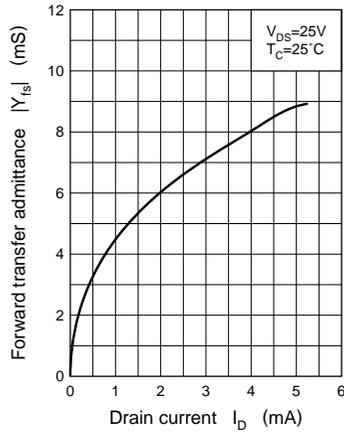
$I_D - V_{GS}$



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



$|Y_{fs}| - I_D$



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