

2SK2751

Silicon N-Channel Junction FET

For impedance conversion in low frequency

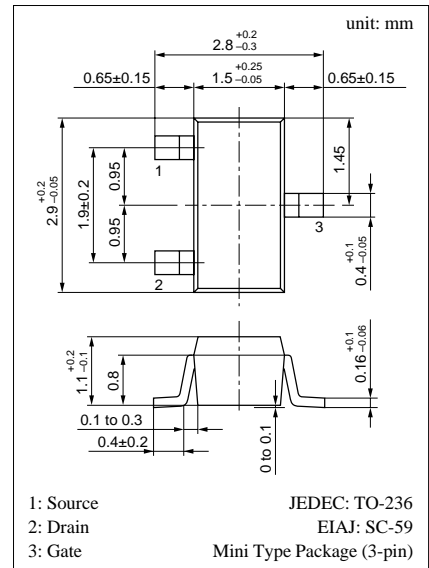
For pyroelectric sensor

■ 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	Rated	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	$^\circ\text{C}$



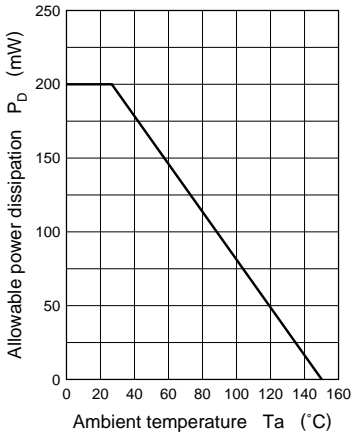
Marking Symbol: HS

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

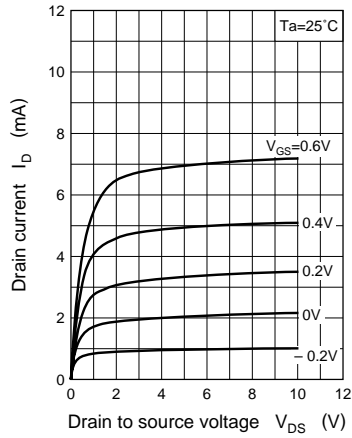
Parameter	Symbol	Conditions	min	typ	max	Unit
Drain to Source cut-off current	I_{DSS}	$V_{DS} = 10\text{V}, V_{GS} = 0$	1.4		4.7	mA
Gate to Source leakage current	I_{GSS}	$V_{GS} = -20\text{V}, V_{DS} = 0$			-1	nA
Gate to Drain voltage	V_{GDS}	$I_G = -100\mu\text{A}, V_{DS} = 0$	-40			V
Gate to Source 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.

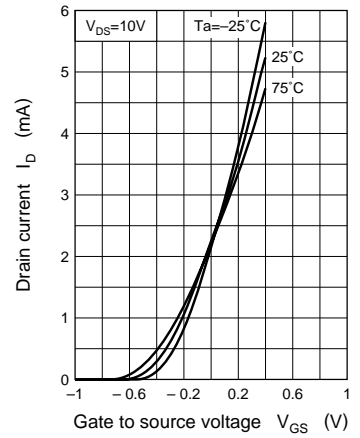
$P_D - T_a$



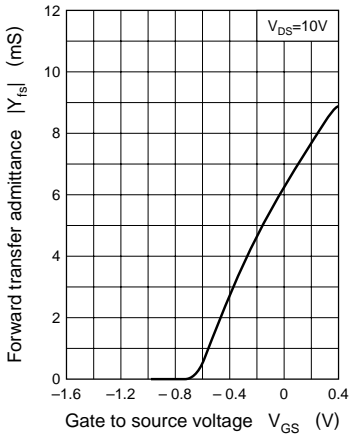
$I_D - V_{DS}$



$I_D - V_{GS}$



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



$|Y_{fs}| - I_D$

