

# 2SK2751

## Silicon N-channel junction FET

For impedance conversion in low frequency

For pyroelectric sensor

### ■ Features

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

### ■ Package

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

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

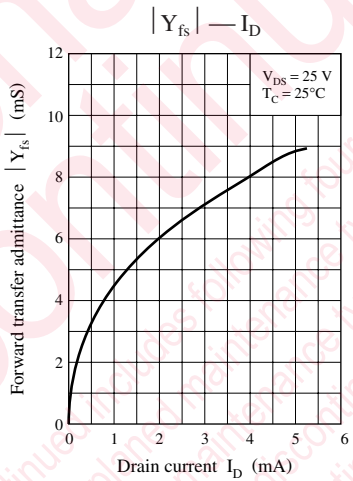
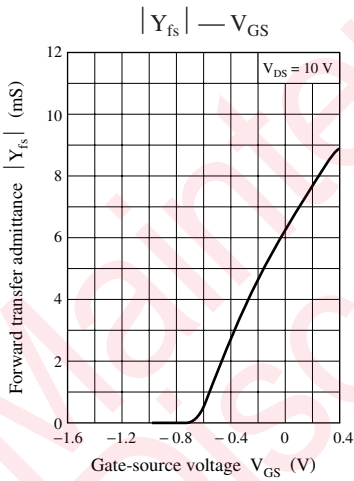
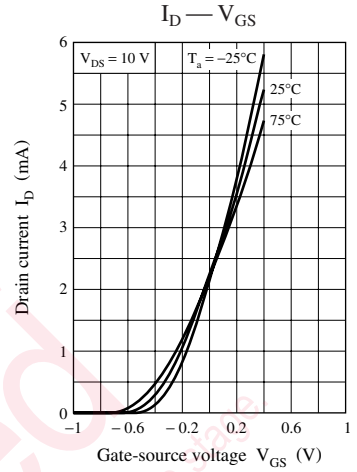
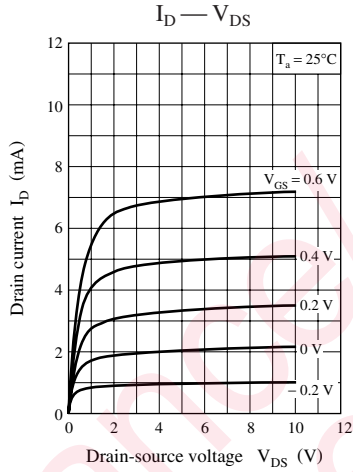
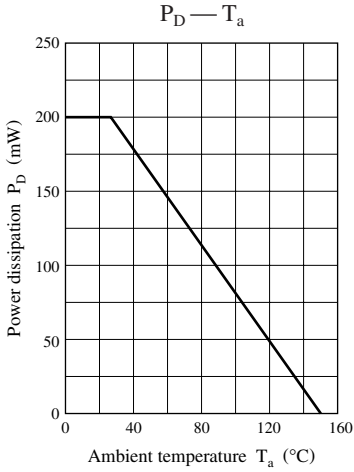
Parameter	Symbol	Rating	Unit
Gate-drain surrender voltage	$V_{GDS}$	-40	V
Drain current	$I_D$	10	mA
Gate current	$I_G$	2	mA
Power dissipation	$P_D$	200	mW
Channel temperature	$T_{ch}$	150	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-55 to +150	$^\circ\text{C}$

### ■ Marking Symbol: HS

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

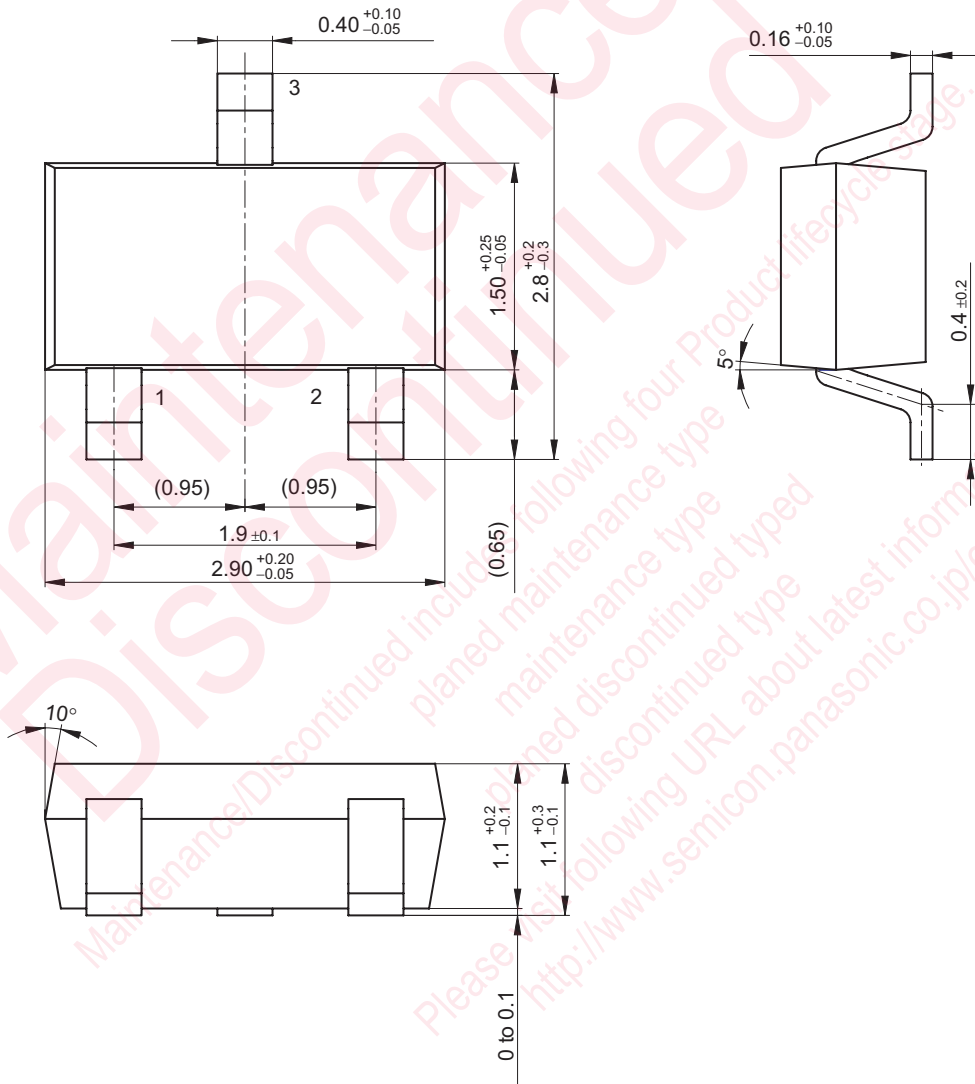
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Gate-drain surrender voltage	$V_{GDS}$	$I_G = -100 \mu\text{A}$ , $V_{DS} = 0$	-40			V
Drain-source current	$I_{DSS}$	$V_{DS} = 10 \text{ V}$ , $V_{GS} = 0$	1.4		4.7	$\mu\text{A}$
Gate-source cutoff current	$I_{GSS}$	$V_{GS} = -20 \text{ V}$ , $V_{DS} = 0$			-1.0	$\mu\text{A}$
Gate-source cutoff voltage	$V_{GSC}$	$V_{DS} = 10 \text{ V}$ , $I_D = 1 \mu\text{A}$			-3.5	V
Forward transfer admittance	$ Y_{fs} $	$V_{DS} = 10 \text{ V}$ , $I_D = 1 \text{ mA}$ , $f = 1 \text{ kHz}$	2.5			mS
Short-circuit forward transfer capacitance (Common source)	$C_{iss}$	$V_{DS} = 10 \text{ V}$ , $V_{GS} = 0$ , $f = 1 \text{ MHz}$		5.0		pF
Short-circuit output capacitance (Common source)	$C_{oss}$			1.0		pF
Reverse transfer capacitance (Common source)	$C_{rss}$			1.0		pF

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



Mini3-G1

Unit: mm



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