

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.

■ 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	$^\circ\text{C}$

■ Package

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

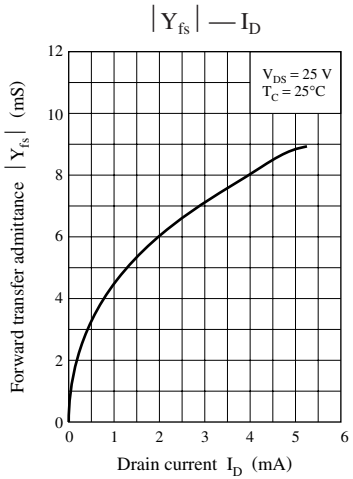
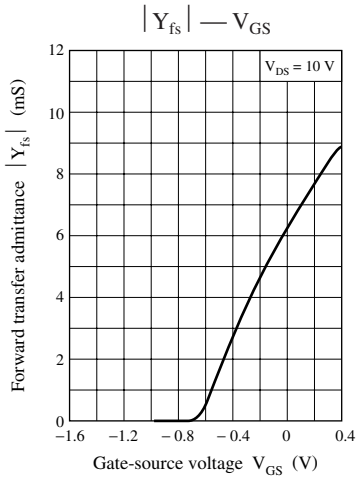
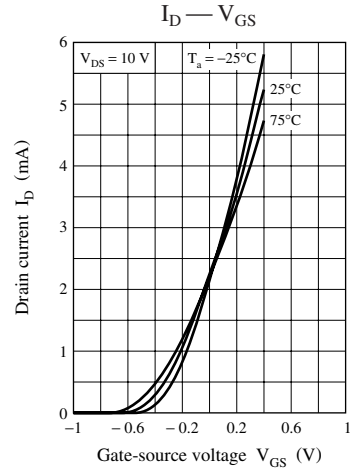
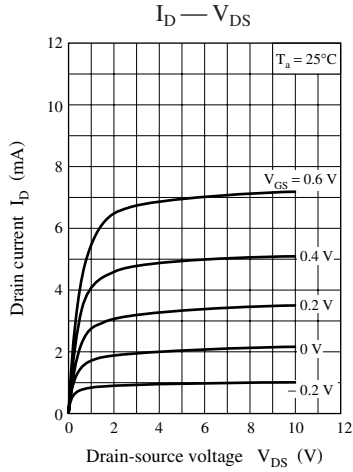
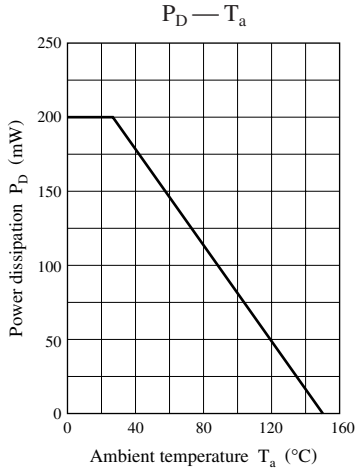
■ Marking Symbol: HS

■ 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	μA
Gate-source cutoff current	I_{GSS}	$V_{GS} = -20 \text{ V}$, $V_{DS} = 0$			-1.0	μA
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

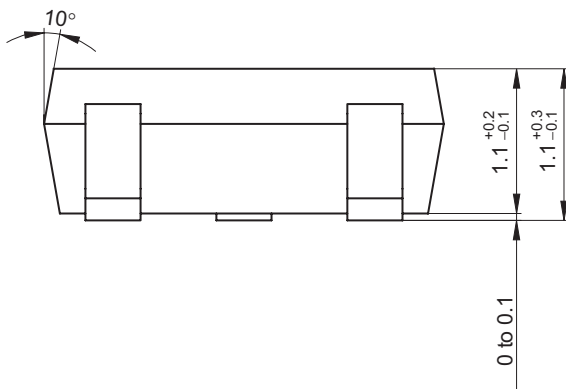
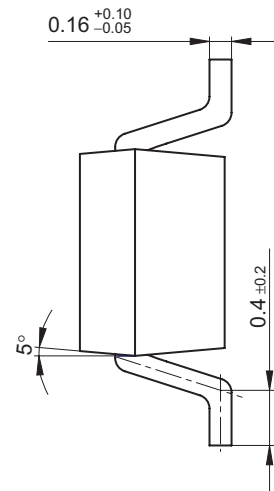
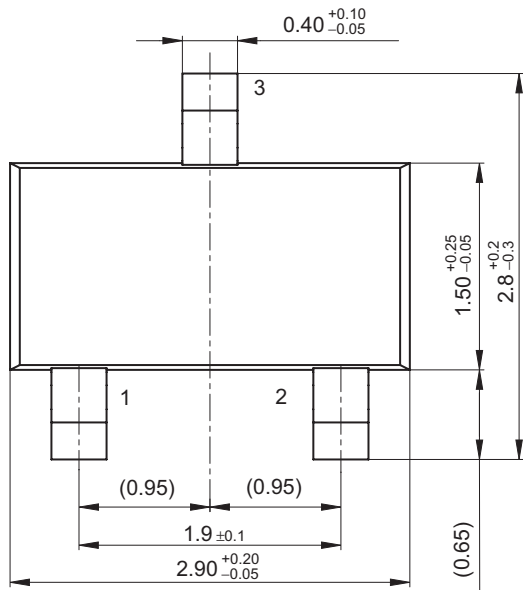
Note) Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

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Mini3-G1

Unit: mm



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