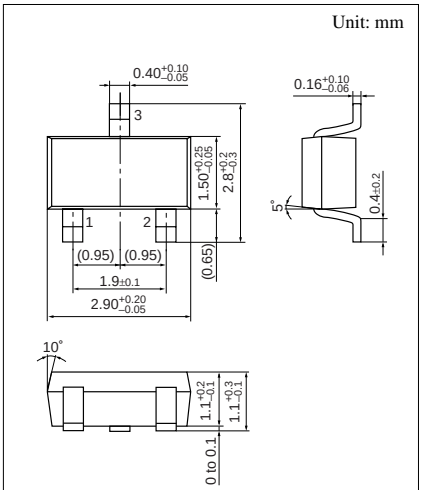
2SK2751

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_{GDO}
- Mini-type package, allowing downsizing of the sets and automatic insertion through the tape/magazine packing.



Marking Symbol: HS

■ Absolute Maximum Ratings (T_a = 25°C)

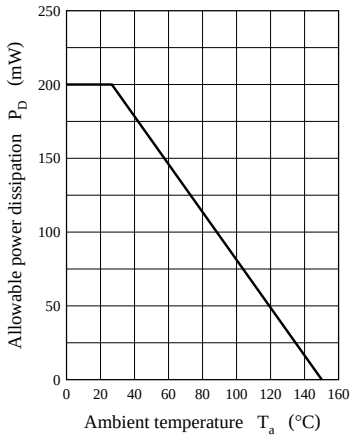
Parameter	Symbol	Ratings	Unit
Gate to Drain voltage	V_{GDS}	−40	V
Drain current	I_D	10	mA
Gate current	I_G	2	mA
Allowable power dissipation	P_D	200	mW
Channel temperature	T_{ch}	150	°C
Storage temperature	T_{stg}	−55 to +150	°C

■ Electrical Characteristics (T_a = 25°C ± 3°C)

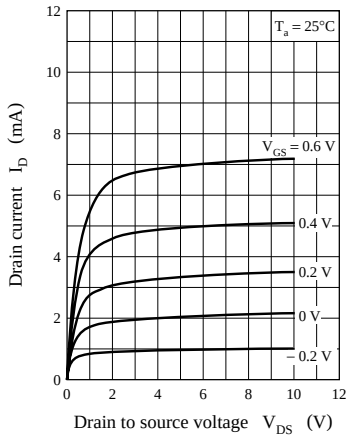
Parameter	Symbol	Conditions	min	typ	max	Unit
Drain to Source cut-off current	I_{DSS}	V_{DS} = 10 V, V_{GS} = 0	1.4		4.7	mA
Gate to Source leakage current	I_{GSS}	V_{GS} = −20 V, V_{DS} = 0			−1	nA
Gate to Drain voltage	V_{GDS}	I_G = −100 µA, V_{DS} = 0	−40			V
Gate to Source cut-off voltage	V_{GSC}	V_{DS}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

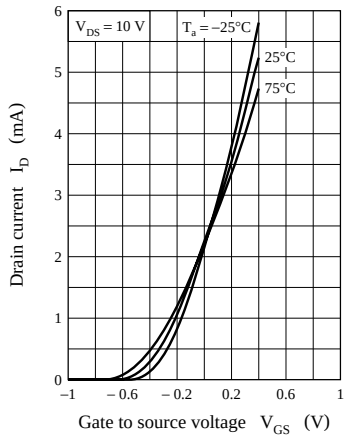
P_D — T_a



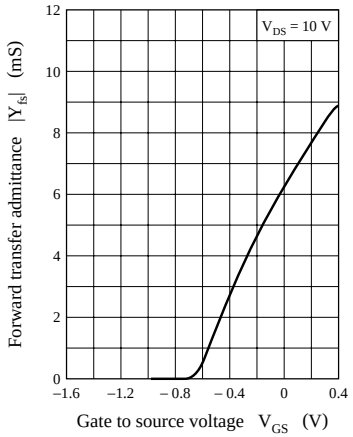
I_D — V_{DS}



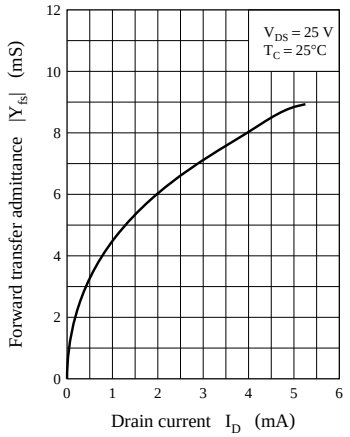
I_D — V_{GS}



$|Y_{fs}|$ — V_{GS}



$|Y_{fs}|$ — I_D



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