DSK5J01

Silicon N-channel Junction FET

For low frequency amplification
For pyroelectric sensor

■ Features

- High gate-drain voltage (source open) V_{GDO}
- Contributes to miniaturization of sets, reduction of component count.
- Eco-friendly Halogen-free package

■ Packaging

Embossed type (Thermo-compression sealing): 3000 pcs / reel (standard)

■ Package

- Code
  SMini3-F2-B
- Pin Name
  1: Source
  2: Drain
  3: Gate

■ Marking Symbol: B6

■ Absolute Maximum Ratings $T_a = 25°C$

Parameter	Symbol	Rating	Unit
Gate-drain breakdown voltage	V_{GDS}	–55	V
Drain current	I_D	30	mA
Gate current	I_G	10	mA
Power dissipation	P_D	150	mW
Channel temperature	T_{ch}	150	°C
Storage temperature	T_{stg}	–55 to +150	°C

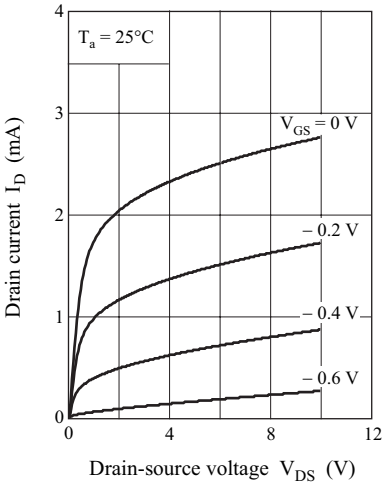
■ Electrical Characteristics $T_a = 25°C \pm 3°C$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Gate-drain breakdown voltage	V_{GDS}	$I_G = –100\ \mu A$, $V_{DS} = 0$	–55			V
Drain-source cutoff current *	I_{DSS}	$V_{DS} = 10$ V, $V_{GS} = 0$	1.0		12.0	mA
Gate-source cutoff current	I_{GSS}	$V_{GS} = –30$ V, $V_{DS} = 0$			–10	nA
Gate-source cutoff voltage	V_{GSC}	$V_{DS} = 10$ V, $I_D = 10\ \mu A$			–5	V
Forward transfer admittance	$\lvert Y_{fs} \rvert$	$V_{DS} = 10$ V, $I_D = 5$ mA, f = 1 MHz	2.5	7.5		mS
Short-circuit input capacitance (Common source)	C_{iss}	$V_{DS} = 10$ V, $V_{GS} = 0$, f = 1 MHz		6.0		pF
Reverse transfer capacitance (Common source)	C_{rss}			2.5		pF

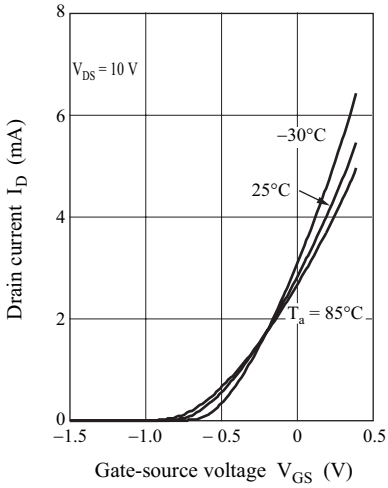
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.
2. *: Rank classification

Code	P	Q	R
Rank	P	Q	R
I_{DSS}	1.0 to 3.0	2.0 to 6.5	5.0 to 12.0
Marking Symbol	B6P	B6Q	B6R

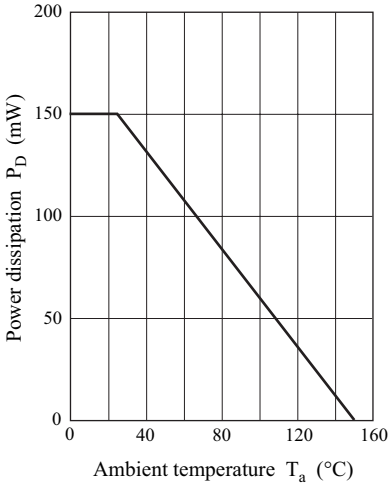
I_D — V_{DS}



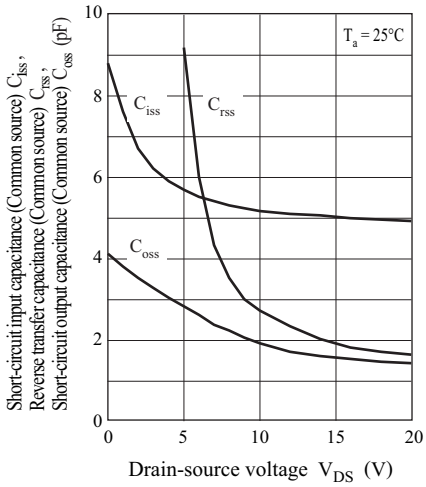
I_D — V_{GS}



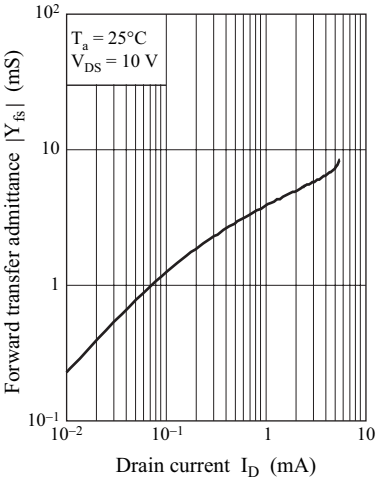
P_D — T_a



C_{iss} , C_{rss} , C_{oss} — V_{DS}

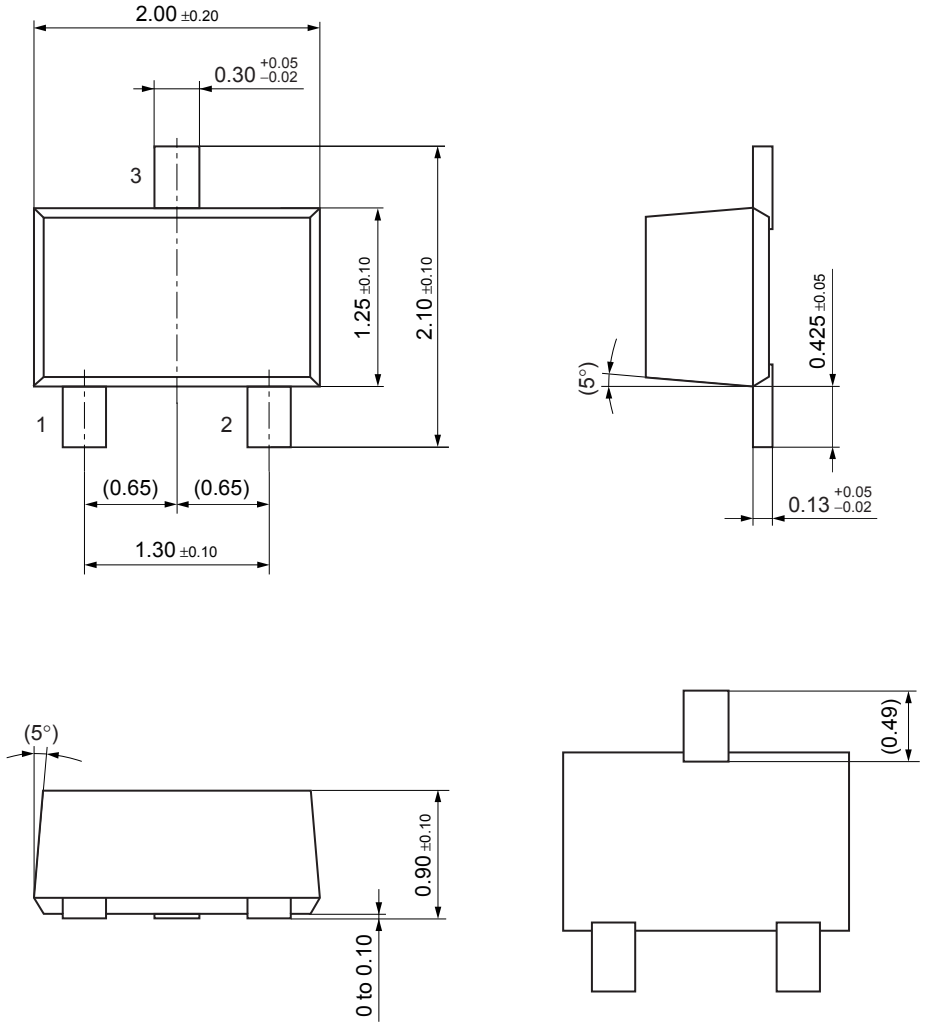


$|Y_{fs}|$ — I_D



SMini3-F2-B

Unit: mm



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