2SK3426

Silicon N-Channel Junction FET

For impedance conversion in low frequency
For electret capacitor microphone

■ Features
- High mutual conductance g_m
- Low noise voltage NV

■ Package
- Code
  SSSMini3-F1
- Pin Name
  1: Drain
  2: Source
  3: Gate

■ Marking Symbol: 4E

■ Absolute Maximum Ratings $T_a = 25°C$

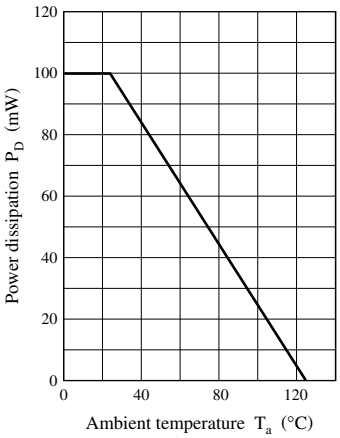
Parameter	Symbol	Rating	Unit
Drain-source voltage (Gate open)	V_{DSO}	20	V
Drain-gate voltage (Source open)	V_{DGO}	20	V
Drain-source current (Gate open)	I_{DSO}	2	mA
Drain-gate current (Source open)	I_{DGO}	2	mA
Gate-source current (Drain open)	I_{GSO}	2	mA
Power dissipation	P_D	100	mW
Operating ambient temperature	T_{opr}	−20 to +80	°C
Storage temperature	T_{stg}	−55 to +125	°C

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

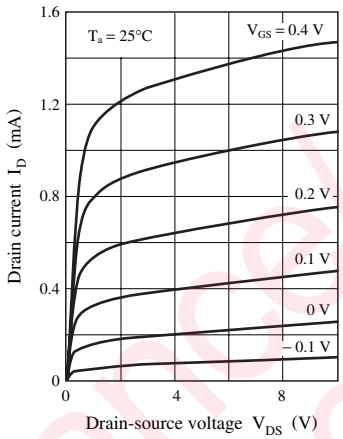
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Drain current [*1]	I_D	$V_{DS} = 2.0$ V, $R_D = 2.2$ kΩ ± 1%	100		460	μA
Drain-source current	I_{DSS}	$V_{DS} = 2.0$ V, $R_D = 2.2$ kΩ ± 1%, $V_{GS} = 0$	107		470	μA
Mutual conductance	g_m	$V_D = 2.0$ V, $V_{GS} = 0$, f = 1 kHz	660	1 600		μS
Noise voltage	NV	$V_D = 2.0$ V, $R_D = 2.2$ kΩ ± 1% $C_O = 5$ pF, A-Curve			10	μV
Voltage gain	G_{V1}	$V_D = 2.0$ V, $R_D = 2.2$ kΩ ± 1% $C_O = 5$ pF, $e_G = 10$ mV, f = 1 kHz	−7.5	−4.7		dB
	G_{V2}	$V_D = 12$ V, $R_D = 2.2$ kΩ ± 1% $C_O = 5$ pF, $e_G = 10$ mV, f = 1 kHz	−4.0	−1.5		
	G_{V3}	$V_D = 1.5$ V, $R_D = 2.2$ kΩ ± 1% $C_O = 5$ pF, $e_G = 10$ mV, f = 1 kHz	−8.0	−5.0		
	$\Delta\|G_V . f\|$ [*2]	$V_D = 2.0$ V, $R_D = 2.2$ kΩ ± 1% $C_O = 5$ pF, $e_G = 10$ mV, f = 1 kHz to 70 Hz		0	1.7	
Voltage gain difference	$\|G_{V2} - G_{V1}\|$		0		4.0	dB
	$\|G_{V1} - G_{V3}\|$		0		1.7	

Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.
2. *1: I_D is assured for I_{DSS}.
*2: $\Delta|G_V . f|$ is assured for AQL 0.065%. (The measurement method is used by source-grounded circuit.)

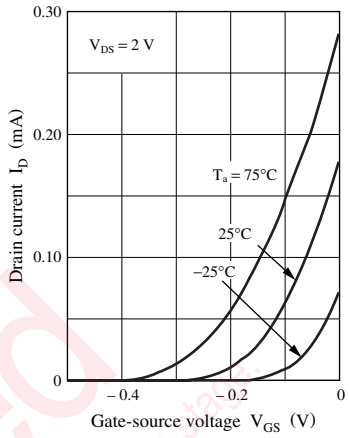
P_D — T_a



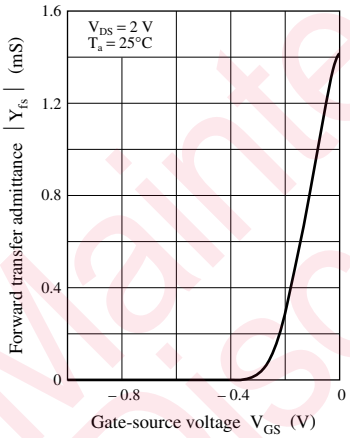
I_D — V_{DS}



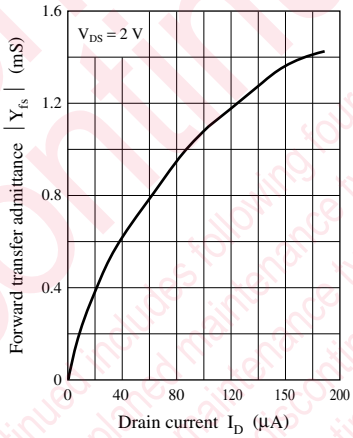
I_D — V_{GS}



$|Y_{fs}|$ — V_{GS}

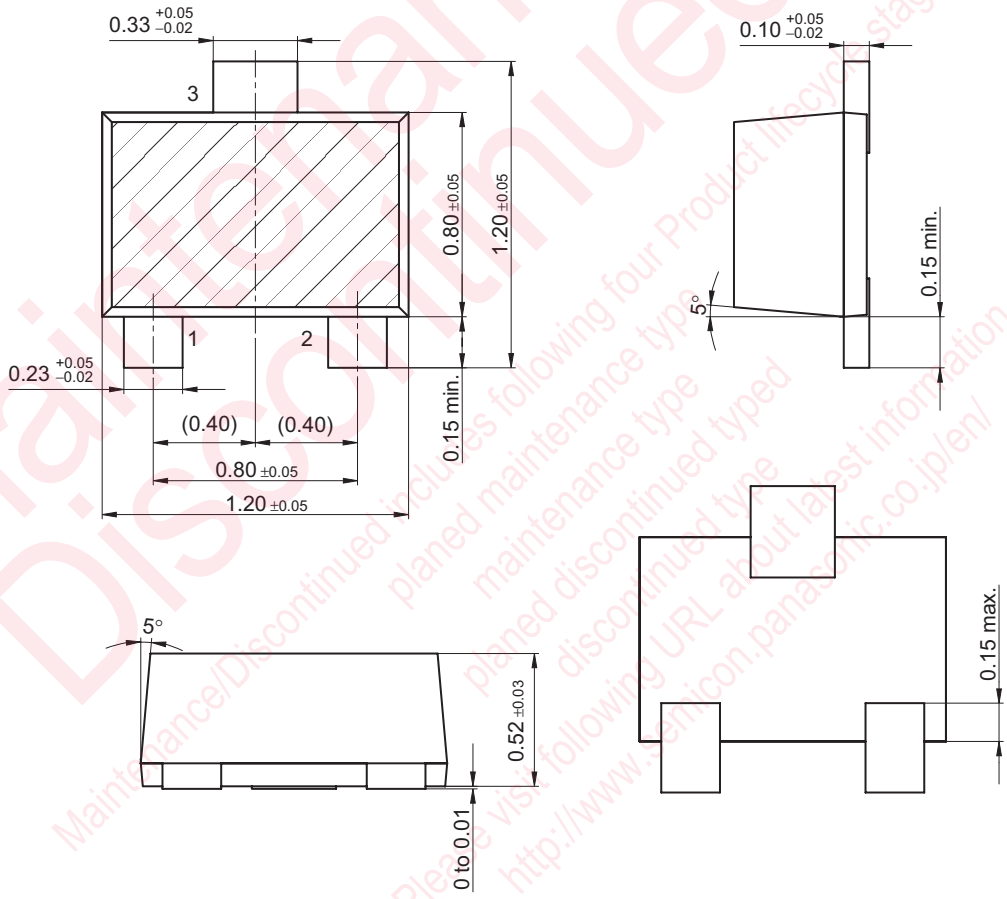


$|Y_{fs}|$ — I_D



SSSMini3-F1

Unit: mm



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