XP1D873

Silicon N-channel junction FET

For analog switching

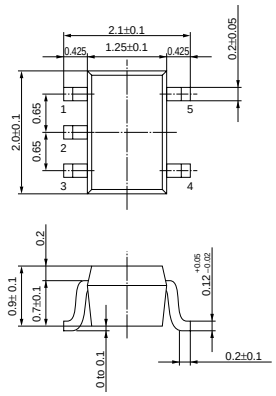
Features

- Two elements incorporated into one package.
  (Drain-coupled FETs)
- Reduction of the mounting area and assembly cost by one half.
- Low-frequency and low-noise J-FET.

Basic Part Number of Element

- 2SK1103 × 2 elements

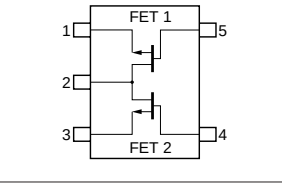
Unit: mm



1 : Source (FET1)
2 : Drain (FET1, 2)
3 : Source (FET2)
4 : Gate (FET2)
5 : Gate (FET1)
EIAJ : SC–88A
S–Mini Type Package (5–pin)

Marking Symbol: OC

Internal Connection



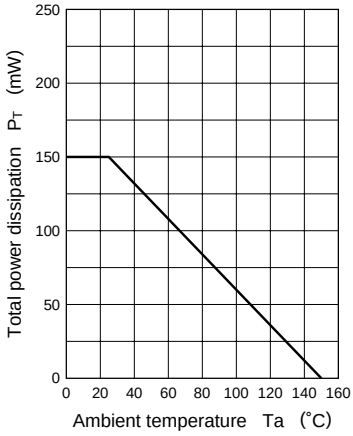
Absolute Maximum Ratings (Ta=25˚C)

Parameter		Symbol	Ratings	Unit
Rating of element	Gate to drain voltage	V_{GDS}	–50	V
	Drain current	I_D	30	mA
	Gate current	I_G	10	mA
Overall	Total power dissipation	P_T	150	mW
	Channel temperature	T_{ch}	150	˚C
	Storage temperature	T_{stg}	–55 to +150	˚C

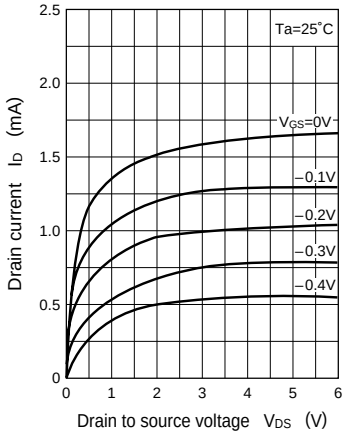
Electrical Characteristics (Ta=25˚C)

Parameter	Symbol	Conditions	min	typ	max	Unit
Drain voltage	V_{GDS}	I_G = –10μA, V_{DS} = 0	–50			V
Drain current	I_{DSS}	V_{DS} = 10V, V_{GS} = 0	0.2		6.0	mA
Gate cutoff current	I_{GSS}	V_{GS} = –30V, V_{DS} = 0			–10	nA
Gate to source cutoff voltage	V_{GSC}	V_{DS} = 10V, I_D = 10μA		–1.5	–3.5	V
Mutual conductance	g_m	V_{DS} = 10V, I_D = 1mA, f = 1kHz	1.8	2.5		mS
Drain ON resistance	$R_{DS(on)}$	V_{DS} = 10mV, V_{GS} = 0		300		Ω
Common source short-circuit input capacitance	C_{iss}	V_{DS} = 10V, V_{GS} = 0, f = 1MHz		7		pF
Common source reverse transfer capacitance	C_{rss}	V_{DS} = 10V, V_{GS} = 0, f = 1MHz		1.5		pF
Common source short-circuit output capacitance	C_{oss}	V_{DS} = 10V, V_{GS} = 0, f = 1MHz		1.5		pF

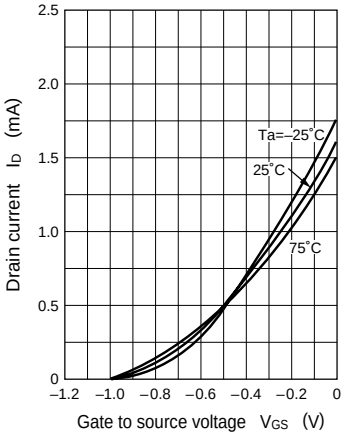
P_T — Ta



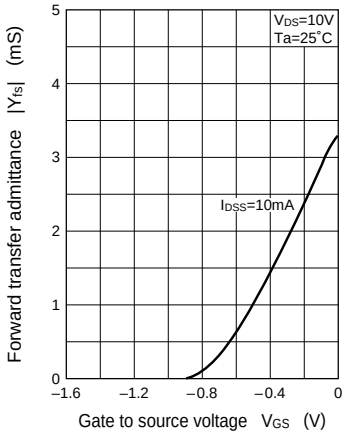
I_D — V_{DS}



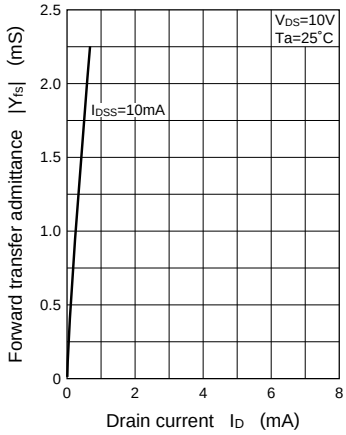
I_D — V_{GS}



$|Y_{fs}|$ — V_{GS}



$|Y_{fs}|$ — I_D



C_{iss}, C_{rss}, C_{oss} — V_{DS}