

# XP1D873

## Silicon N-channel junction FET

For analog switching

### Features

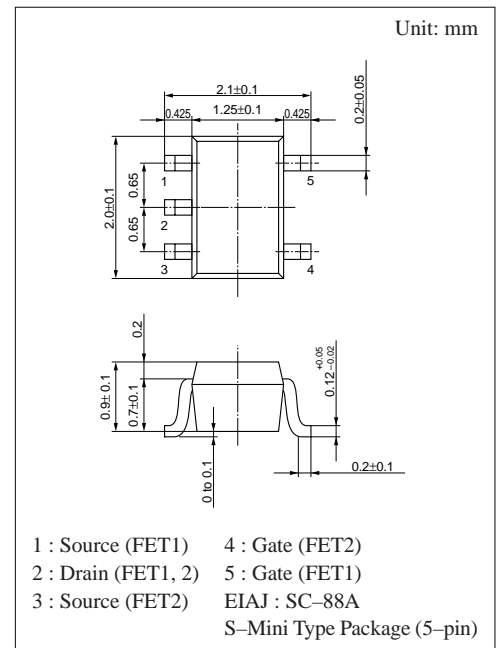
- Two elements incorporated into one package.  
(Drain-coupled FETs)
- Reduction of the mounting area and assembly cost by one half.
- Low-frequency and low-noise J-FET.

### Basic Part Number of Element

- 2SK1103 × 2 elements

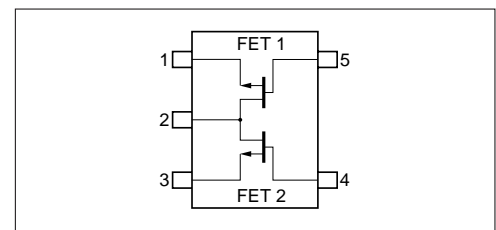
### Absolute Maximum Ratings (Ta=25°C)

Parameter		Symbol	Rated	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



Marking Symbol: OC

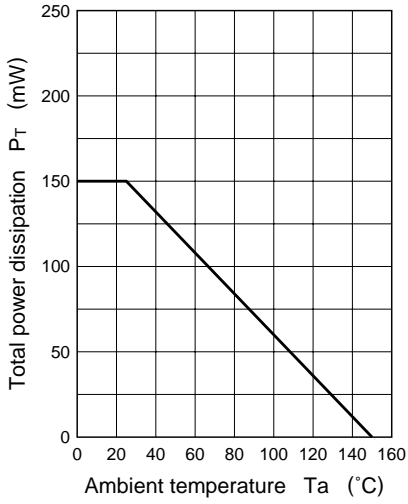
Internal Connection



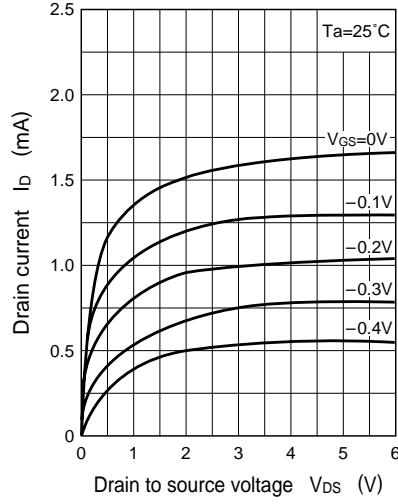
### Electrical Characteristics (Ta=25°C)

Parameter	Symbol	Conditions	min	typ	max	Unit
Drain voltage	$V_{GDS}$	$I_G = -10\mu A, V_{DS} = 0$	-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	$V_{GSC}$	$V_{DS} = 10V, I_D = 10\mu A$		-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		$\Omega$
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

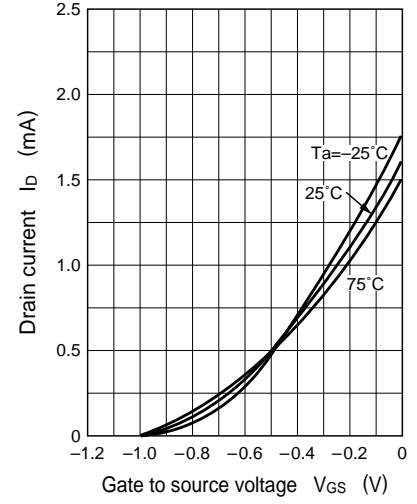
$P_T - T_a$



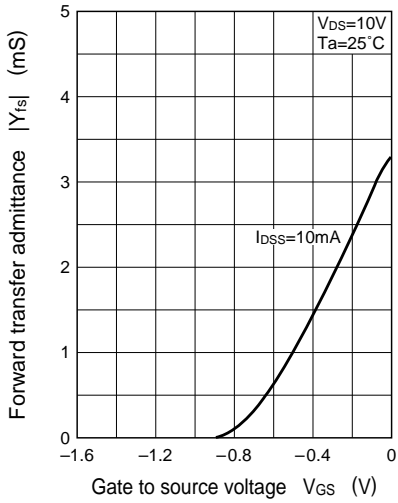
$I_D - V_{DS}$



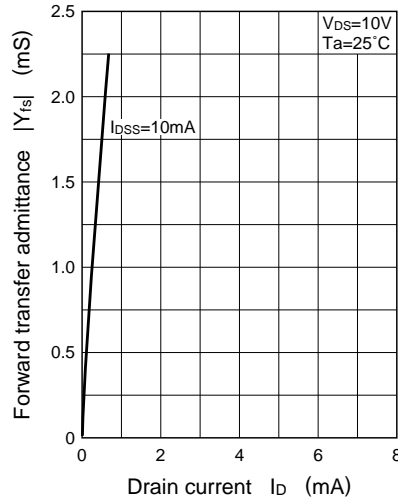
$I_D - V_{GS}$



$|Y_{fs}| - V_{GS}$



$|Y_{fs}| - I_D$



$C_{iss}, C_{rss}, C_{oss} - V_{DS}$

