

# XP0D874 (XP1D874)

## N-channel junction FET

For low-frequency impedance conversion  
 For infrared sensor

### ■ Features

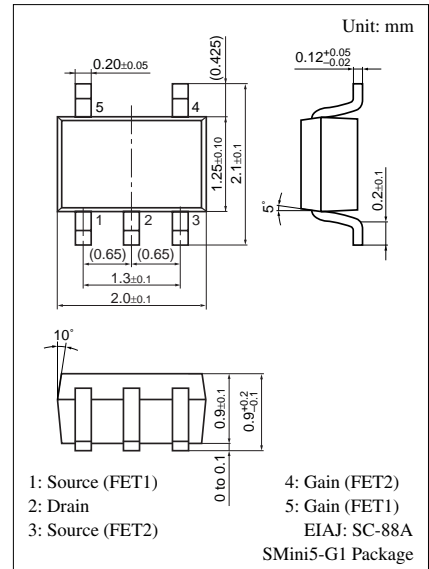
- Two elements incorporated into one package
- Reduction of the mounting area and assembly cost by one half

### ■ Basic Part Number of Element

- 2SK1842 × 2 elements

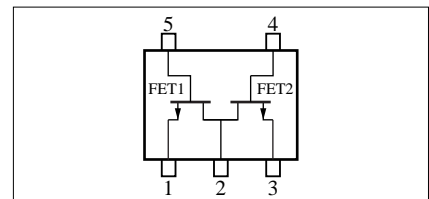
### ■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

	Parameter	Symbol	Rating	Unit
Rating of element	Gate to drain voltage	$V_{GDO}$	-40	V
	Gate to source voltage	$V_{GSO}$	-40	V
	Drain current	$I_D$	1	mA
	Gate current	$I_G$	10	mA
Total	Total power dissipation	$P_T$	150	mW
	Channel temperature	$T_{ch}$	150	$^\circ\text{C}$
	Storage temperature	$T_{stg}$	-55 to +150	$^\circ\text{C}$



Marking Symbol: EQ

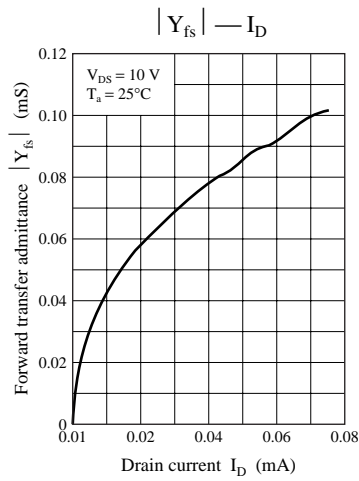
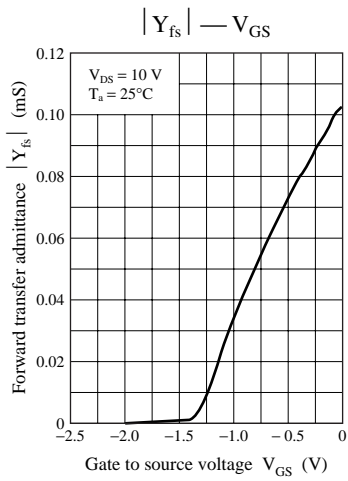
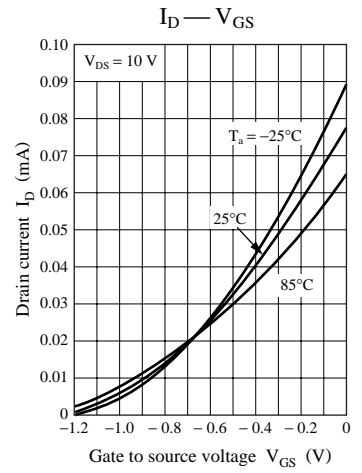
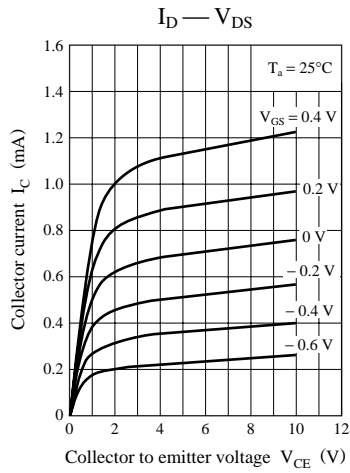
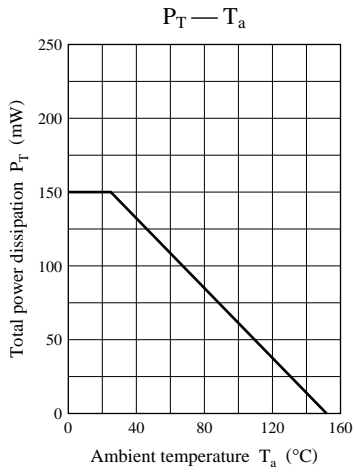
Internal Connection



### ■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Gate to drain voltage	$V_{GDS}$	$I_G = -10 \mu\text{A}$ , $V_{DS} = 0$	-40			V
Drain current	$I_{DSS}$	$V_{DS} = 10 \text{ V}$ , $V_{GS} = 0$	30		200	$\mu\text{A}$
Gate cutoff current	$I_{GSS}$	$V_{GS} = -20 \text{ V}$ , $V_{DS} = 0$			-0.5	nA
Gate to source cutoff voltage	$V_{GSC}$	$V_{DS} = 10 \text{ V}$ , $I_D = 1 \mu\text{A}$		-1.3	-3.0	V
Forward transfer admittance	$ Y_{fs} $	$V_{DS} = 10 \text{ V}$ , $V_{GS} = 0$ , $f = 1 \text{ KHz}$	0.05			mS
Small-signal short-circuit input capacitance	$C_{iss}$	$V_{DS} = 10 \text{ V}$ , $V_{GS} = 0$ , $f = 1 \text{ MHz}$		1.0		pF
Small-signal short-circuit output capacitance	$C_{oss}$	$V_{DS} = 10 \text{ V}$ , $V_{GS} = 0$ , $f = 1 \text{ MHz}$		0.4		pF
Small-signal reverse transfer capacitance	$C_{rss}$	$V_{DS} = 10 \text{ V}$ , $V_{GS} = 0$ , $f = 1 \text{ MHz}$		0.4		pF

Note) The part number in the parenthesis shows conventional part number.



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