

XN01871 (XN1871)

Silicon n-channel junction FET

For low-frequency amplification

■ Features

- Two elements incorporated into one package
(Source-coupled FETs)
- Reduction of the mounting area and assembly cost by one half

■ Basic Part Number

- 2SK0198 (2SK198) × 2

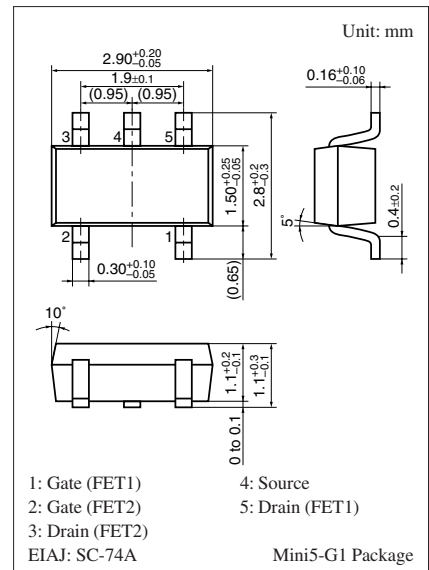
■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Drain-source voltage	V_{DSX}	30	V
Gate-drain voltage (Source open)	V_{GDO}	-30	V
Drain current	I_D	20	mA
Gate current	I_G	10	mA
Total power dissipation	P_T	300	mW
Channel temperature	T_{ch}	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

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

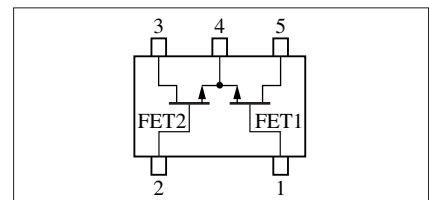
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Drain-source cutoff current	I_{DSS}	$V_{DS} = 10\text{ V}, V_{GS} = 0$	0.5		12	mA
Gate-source cutoff current	I_{GSS}	$V_{GS} = -30\text{ V}, V_{DS} = 0$			-100	nA
Gate-source cutoff voltage	V_{GSC}	$V_{DS} = 10\text{ V}, I_D = 10\ \mu\text{A}$	-0.1		-1.5	V
Mutual conductance	g_m	$V_{DS} = 10\text{ V}, I_D = 0.5\text{ mA}, f = 1\text{ MHz}$	4			mS
		$V_{DS} = 10\text{ V}, V_{GS} = 0, f = 1\text{ kHz}$	4	12		
Short-circuit forward transfer capacitance (Common source)	C_{iss}	$V_{DS} = 10\text{ V}, V_{GS} = 0, f = 1\text{ MHz}$		14		pF
Reverse transfer capacitance (Common source)	C_{rss}	$V_{DS} = 10\text{ V}, V_{GS} = 0, f = 1\text{ MHz}$		3.5		pF
Noise voltage	NV	$V_{DS} = 30\text{ V}, I_D = 1\text{ mA}, G_V = 80\text{ dB}$ $R_g = 100\text{ k}\Omega, \text{Function} = \text{FLAT}$		60		mV

Note) Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

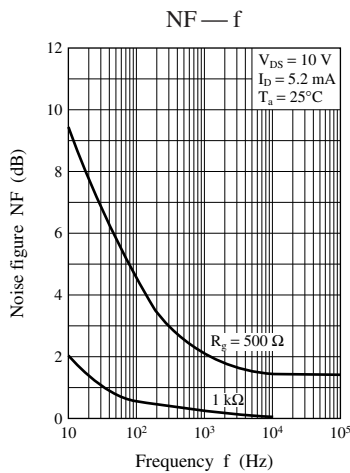
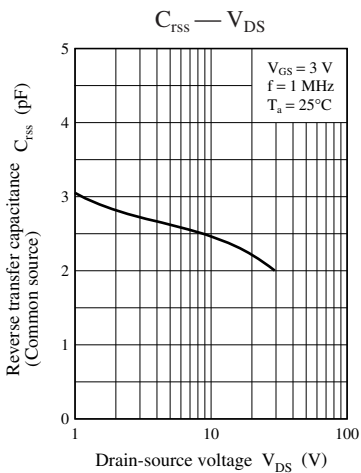
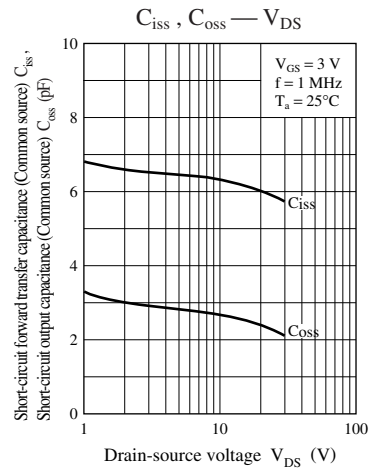
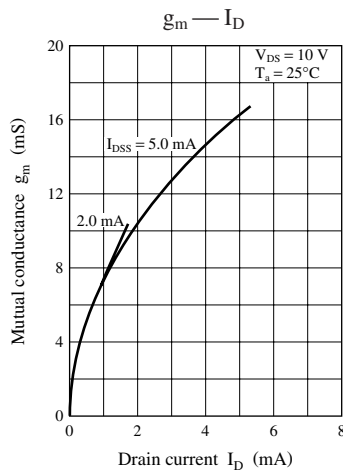
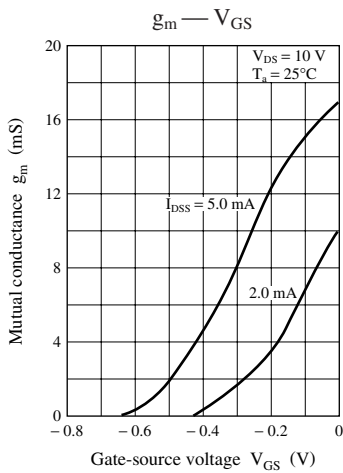
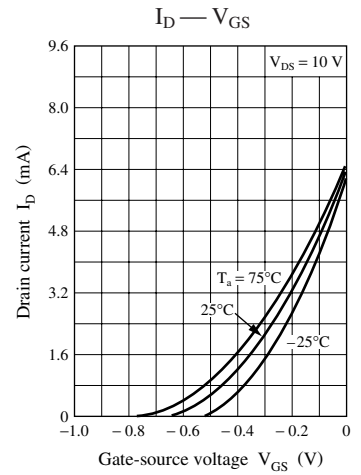
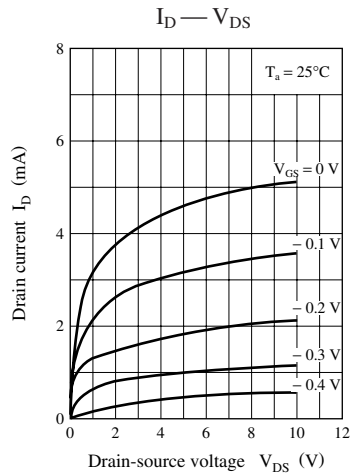
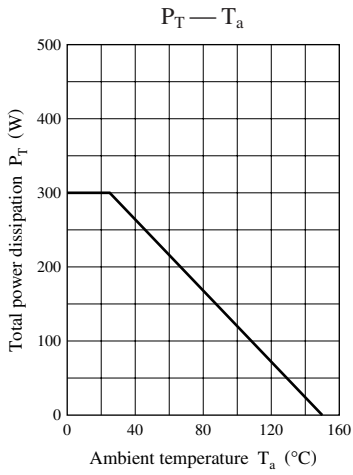


Marking Symbol: 5T

Internal Connection



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



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