

2SK0198 (2SK198)

Silicon N-channel junction FET

For low-frequency amplification

■ Features

- High mutual conductance g_m
- Low-noise characteristics
- Mini type package, allowing downsizing of the sets and automatic insertion through the tape/magazine packing

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

Parameter	Symbol	Rating	Unit
Drain-source voltage	V_{DS}	30	V
Drain-gate voltage (Source open)	V_{DGO}	30	V
Drain current	I_D	20	mA
Gate current	I_G	10	mA
Power dissipation	P_D	150	mW
Channel temperature	T_{ch}	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

■ Package

- Code
Mini3-G1
- Pin Name
1: Source
2: Drain
3: Gate

■ Marking Symbol: 10

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

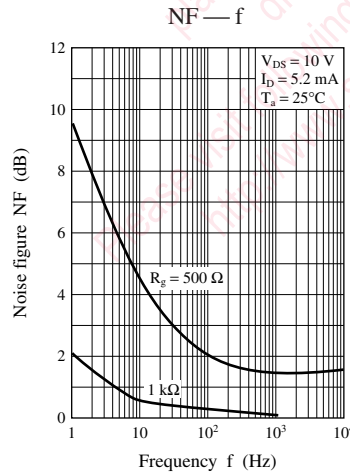
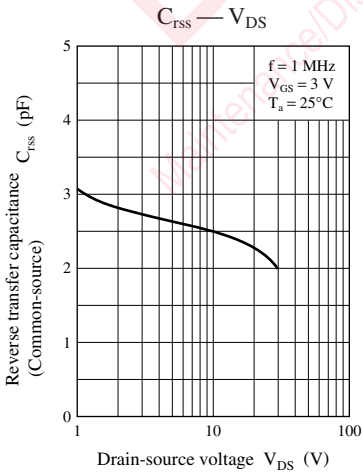
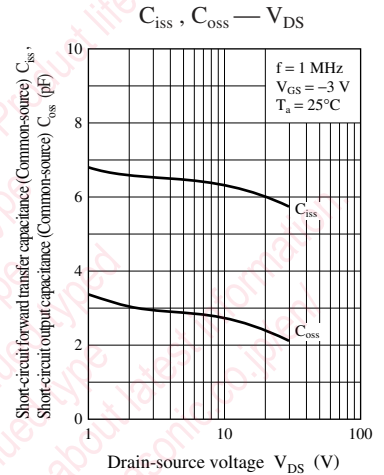
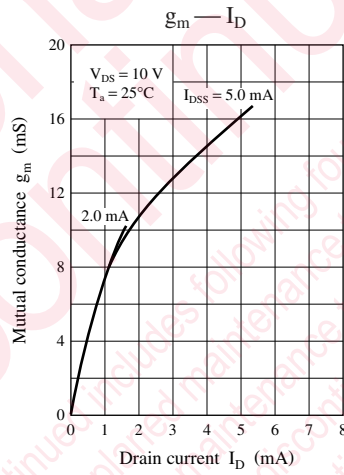
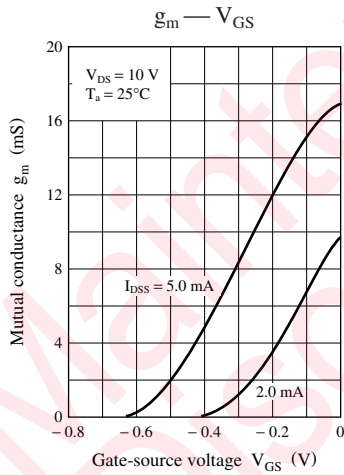
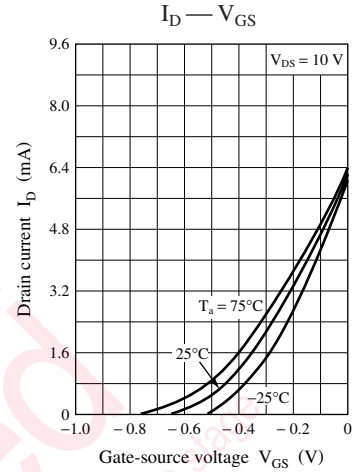
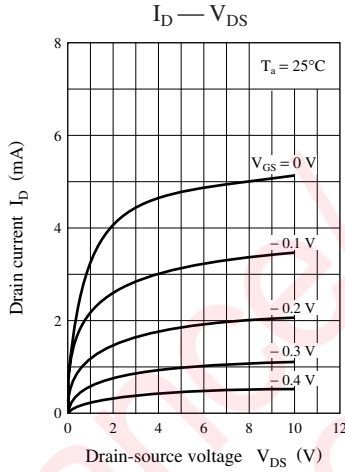
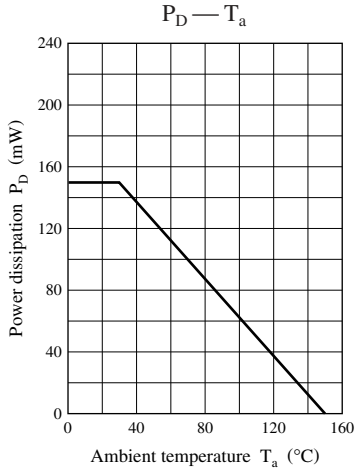
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Drain-source current *	I_{DSS}	$V_{DS} = 10\text{ V}, V_{GS} = 0$	0.5		12	mA
Gate-source cutoff current	I_{GSS}	$V_{GS} = -30\text{ V}, V_{DS} = 0$			100	nA
Gate-source cutoff voltage	V_{GSC}	$V_{DS} = 10\text{ V}, I_D = 10\ \mu\text{A}$	0.1		1.5	V
Forward transfer admittance	$ Y_{fs} $	$V_{DS} = 10\text{ V}, I_D = 0.5\text{ mA}, f = 1\text{ kHz}$	4			mS
		$V_{DS} = 10\text{ V}, V_{GS} = 0, f = 1\text{ kHz}$	4			
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}			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) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

2. *: Rank classification

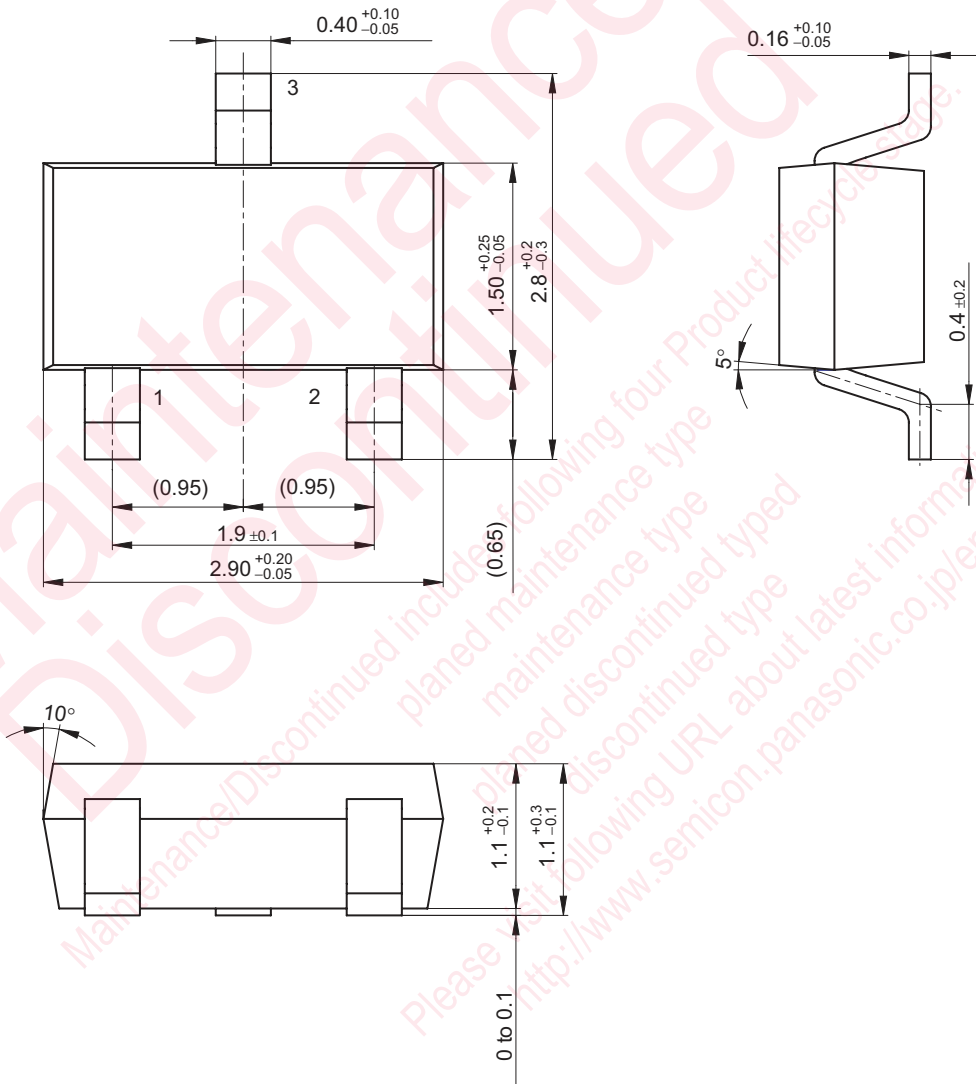
Rank	P	Q	R
I_{DSS} (mA)	0.5 to 3.0	2.0 to 6.0	4.0 to 12.0

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



Mini3-G1

Unit: mm



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