2SK0198 (2SK198)

Silicon N-Channel Junction FET

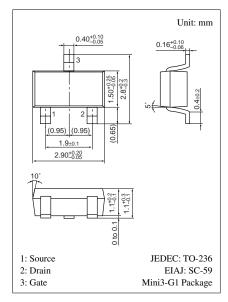
For low-frequency amplification

■ Features

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

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

Parameter	Symbol	Ratings	Unit
Drain to Source voltage	V _{DSX}	30	V
Gate to Drain voltage	V_{GDO}	-30	V
Drain current	I_{D}	20	mA
Gate current	I_G	10	mA
Allowable power dissipation	P_{D}	150	mW
Channel temperature	T _{ch}	150	°C
Storage temperature	T _{stg}	-55 to +150	°C



Marking Symbol (Example): 10

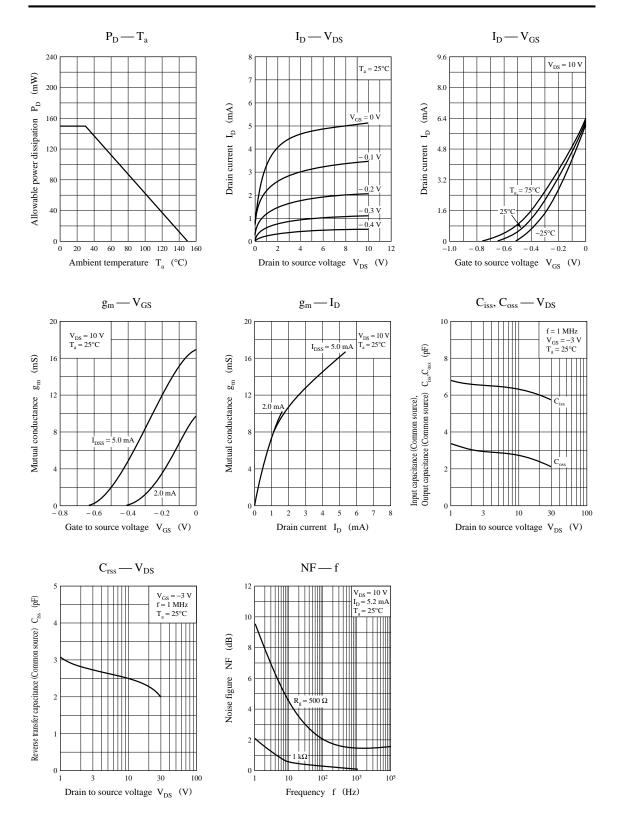
■ Electrical Characteristics (T_a = 25°C)

Parameter	Symbol	Conditions	min	typ	max	Unit
Drain to Source cut-off current	${\rm I_{DSS}}^*$	$V_{DS} = 10 \text{ V}, V_{GS} = 0$	0.5		12	mA
Gate to Source leakage current	I_{GSS}	$V_{GS} = -30 \text{ V}, V_{DS} = 0$			-100	nA
Gate to Source cut-off voltage	V_{GSC}	$V_{DS} = 10 \text{ V}, I_{D} = 10 \mu\text{A}$	- 0.1		-1.5	V
Mutual conductance	g _m	$V_{DS} = 10 \text{ V}, I_{D} = 0.5 \text{ mA}, f = 1 \text{ kHz}$	4			mS
		$V_{DS} = 10 \text{ V}, V_{GS} = 0, f = 1 \text{ kHz}$		13		
Input 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}	$V_{DS} = 10 \text{ V}, V_{GS} = 0, 1 = 1 \text{ NIHZ}$		3.5		pF
Noise figure	NV	$V_{DS} = 30 \text{ V}, I_{D} = 1 \text{ mA}, G_{V} = 80 \text{ dB}$		60		mV
		$R_g = 100 \text{ k}\Omega$, Function = FLAT				

^{*} I_{DSS} rank classification

Runk	P	Q	R
I _{DSS} (mA)	0.5 to 3	2 to 6	4 to 12
Marking Symbol	1OP	10Q	1OR

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



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