



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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

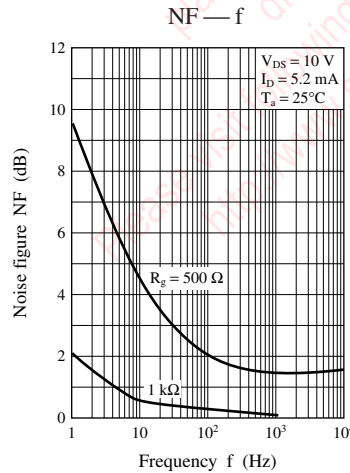
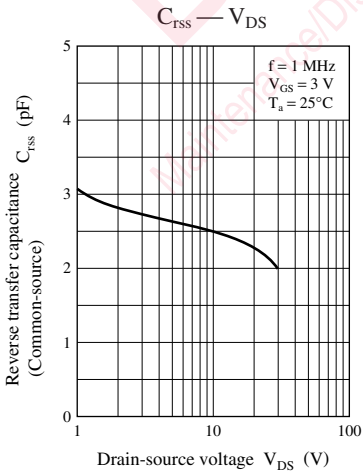
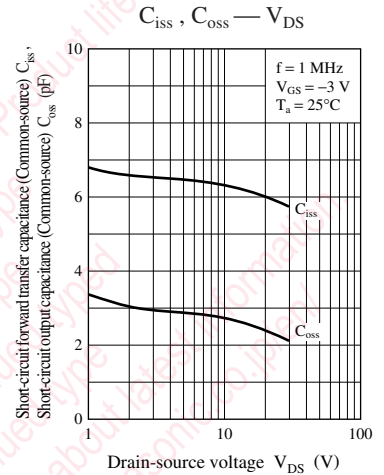
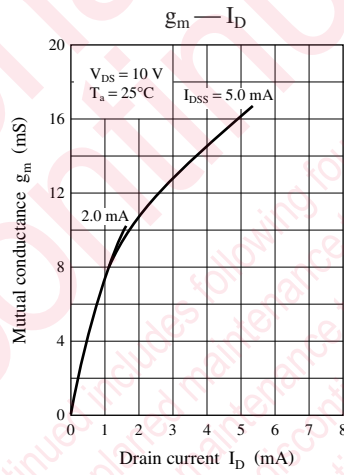
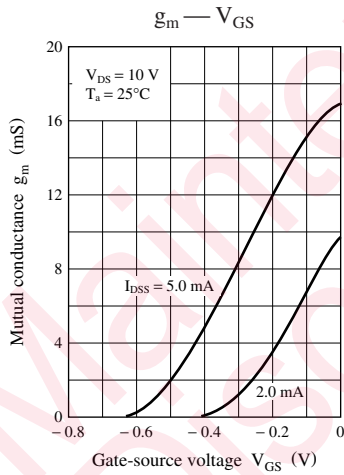
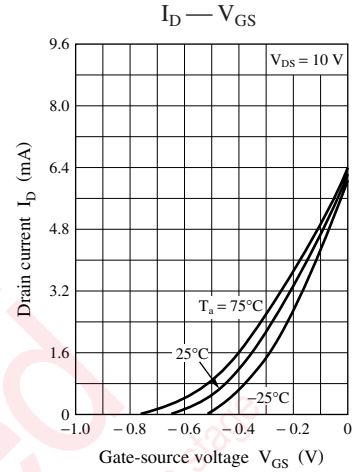
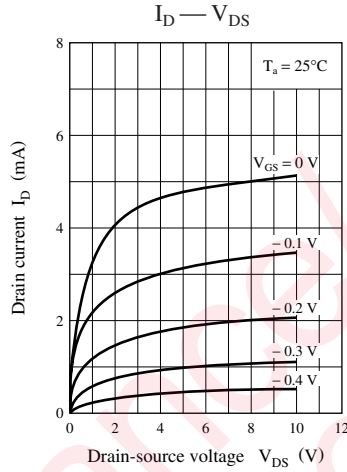
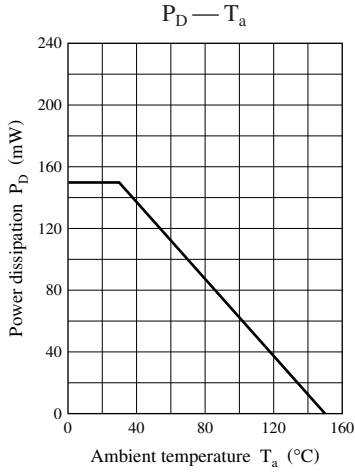
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Drain-source current *	I_{DSS}	$V_{DS} = 10\text{ V}, V_{GS} = 0$	0.5		12	mA
Gate-source cutoff current	I_{GSS}	$V_{GS} = -30\text{ V}, V_{DS} = 0$			100	nA
Gate-source cutoff voltage	V_{GSC}	$V_{DS} = 10\text{ V}, I_D = 10\ \mu\text{A}$	0.1		1.5	V
Forward 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
	C_{rss}			3.5		
Reverse transfer capacitance (Common source)	C_{rss}					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

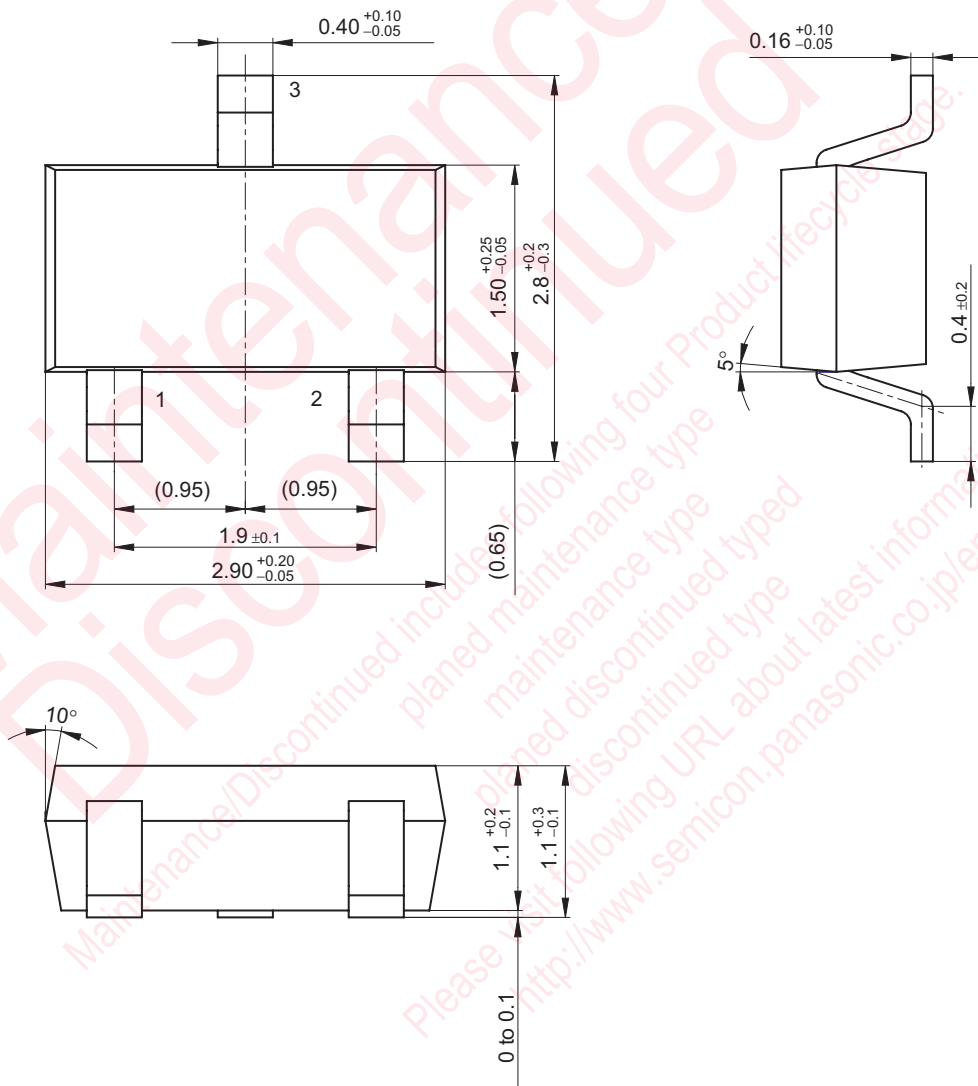
Rank	P	Q	R
I_{DSS} (mA)	0.5 to 3.0	2.0 to 6.0	4.0 to 12.0

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



Mini3-G1

Unit: mm



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