

ANTREX Electronics

Electronic Components Sourcing Information

Product Reference Information

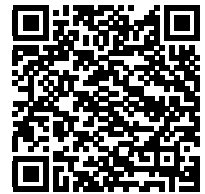
Part Number: 2SK33720TL
Manufacturer: Panasonic Electronic Components
Package: SOT-723
Availability: Please confirm with sales

Product Page:

<https://antrexco.com/product/details/panasonic-electronic-components/2sk33720tl.html>

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Note:

This PDF includes an ANTREX product reference cover page.

The original manufacturer datasheet follows from the next page.

2SK3372

Silicon N-Channel Junction FET

For impedance conversion in low frequency

For electret capacitor microphone

■ Features

- High mutual conductance g_m
- Low noise voltage NV

■ Package

- Code
SSSMINI3-F1
- Pin Name
1: Drain
2: Source
3: Gate

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

Parameter	Symbol	Rating	Unit
Drain-source voltage (Gate open)	V_{DSO}	20	V
Gate-drain voltage (Source open)	V_{GDO}	20	V
Drain-source current (Gate open)	I_{DSO}	2	mA
Gate-drain current (Source open)	I_{GDO}	2	mA
Gate-source current (Drain open)	I_{GSO}	2	mA
Power dissipation	P_D	100	mW
Operating ambient temperature	T_{opr}	-20 to +80	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +125	$^\circ\text{C}$

■ Marking Symbol: 1H

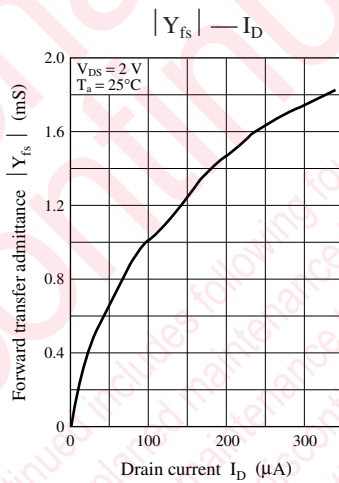
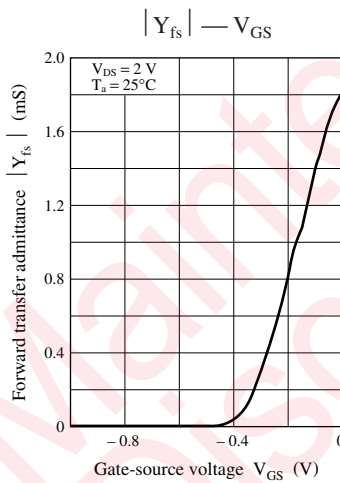
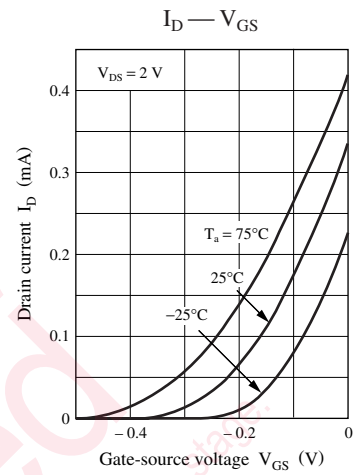
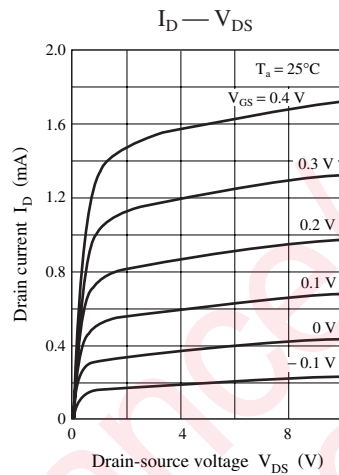
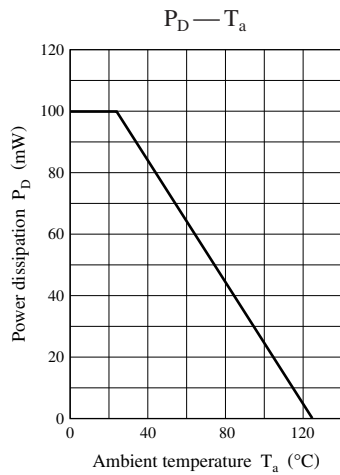
■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Drain current *1	I_D	$V_{DS} = 2.0\text{ V}$, $R_D = 2.2\text{ k}\Omega \pm 1\%$	100		470	μA
Drain-source current	I_{DSS}	$V_{DS} = 2.0\text{ V}$, $R_D = 2.2\text{ k}\Omega \pm 1\%$, $V_{GS} = 0$	107		460	μA
Mutual conductance	g_m	$V_D = 2.0\text{ V}$, $V_{GS} = 0$, $f = 1\text{ kHz}$	660	1 600		μS
Noise voltage	NV	$V_D = 2.0\text{ V}$, $R_D = 2.2\text{ k}\Omega \pm 1\%$ $C_O = 5\text{ pF}$, A-Curve			4	μV
Voltage gain	G_{V1}	$V_D = 2.0\text{ V}$, $R_D = 2.2\text{ k}\Omega \pm 1\%$ $C_O = 5\text{ pF}$, $e_G = 10\text{ mV}$, $f = 1\text{ kHz}$	-7.5	-4.7		dB
	G_{V2}	$V_D = 12\text{ V}$, $R_D = 2.2\text{ k}\Omega \pm 1\%$ $C_O = 5\text{ pF}$, $e_G = 10\text{ mV}$, $f = 1\text{ kHz}$	-4.0	-1.5		
	G_{V3}	$V_D = 1.5\text{ V}$, $R_D = 2.2\text{ k}\Omega \pm 1\%$ $C_O = 5\text{ pF}$, $e_G = 10\text{ mV}$, $f = 1\text{ kHz}$	-8.0	-5.0		
	$\Delta G_V \cdot f $ *2	$V_D = 2.0\text{ V}$, $R_D = 2.2\text{ k}\Omega \pm 1\%$ $C_O = 5\text{ pF}$, $e_G = 10\text{ mV}$, $f = 1\text{ kHz}$ to 70 Hz		0	1.7	
Voltage gain difference	$ G_{V2} - G_{V1} $		0		4.0	dB
	$ G_{V1} - G_{V3} $		0		1.7	

Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

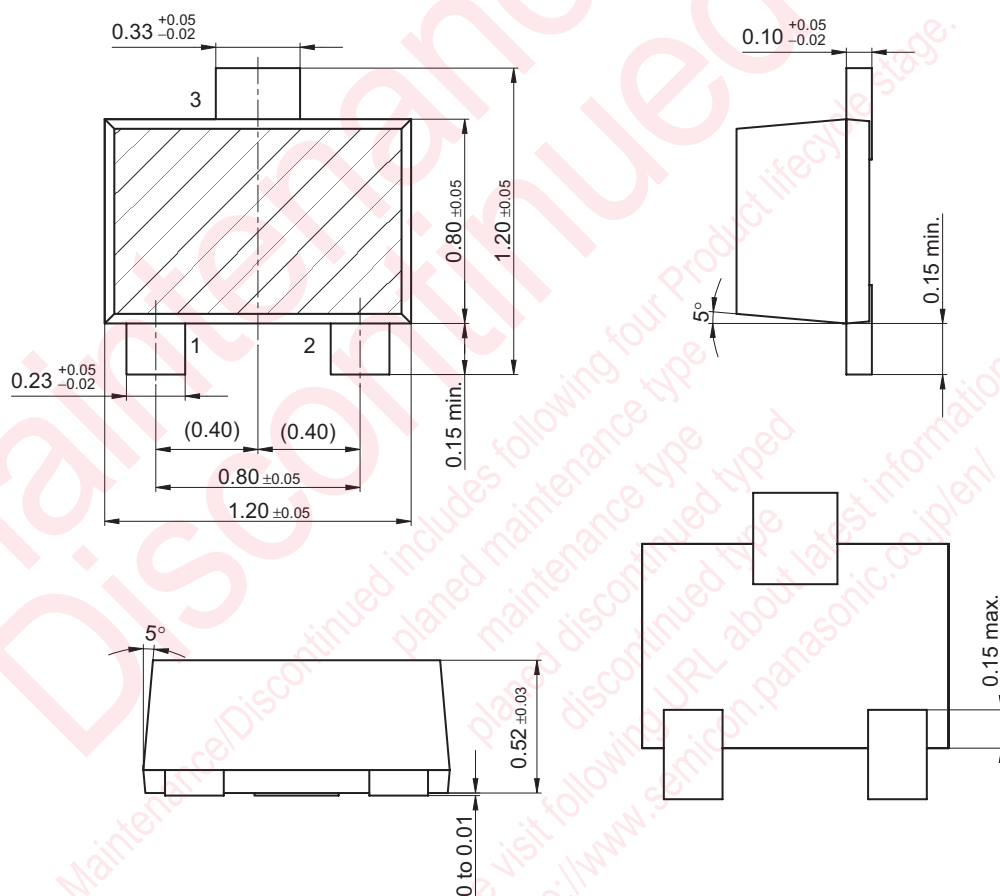
2. *1: I_D is assured for I_{DSS} .

*2: $\Delta |G_V \cdot f|$ is assured for AQL 0.065%. (The measurement method is used by source-grounded circuit.)



SSSMini3-F1

Unit: mm



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