

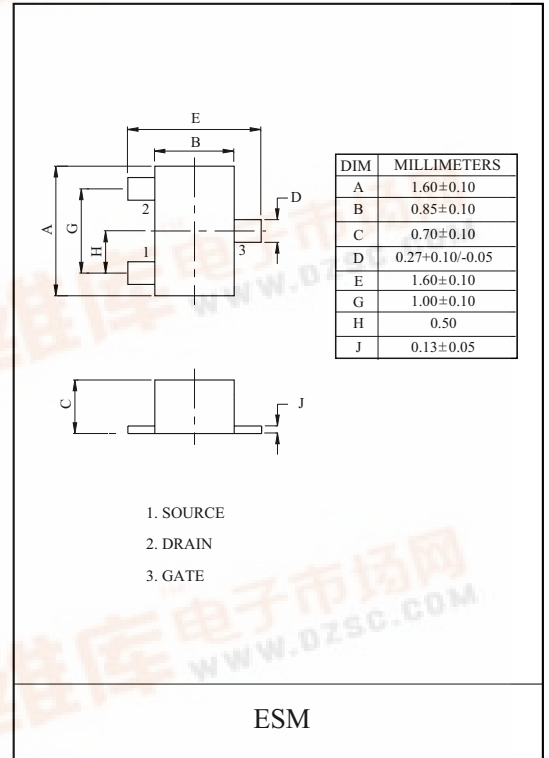
CONDENSER MICROPHONE APPLICATION.

FEATURES

- Expecially Suited for Use in Audio, Telephone.
- Capacitor Microphones.
- Excellent Voltage Characteristics.
- Excellent Transient Characteristics.

MAXIMUM RATING (Ta=25℃)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Gate-Drain Voltage	V _{GD0}	-20	V
Gate Current	I _G	10	mA
Drain Current	I _D	1	mA
Drain Power Dissipation	P _D	100	mW
Junction Temperature	T _j	150	℃
Storage Temperature Range	T _{stg}	-55 ~ 150	℃

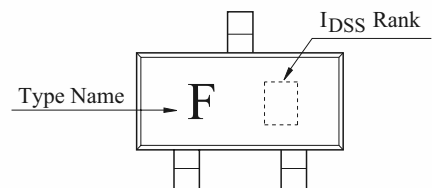


ELECTRICAL CHARACTERISTICS (Ta=25℃)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Gate-Drain Breakdown Voltage	V _{(BR)GDO}	I _G =-100μA	-20	-	-	V
Gate-Source Cut-off Voltage	V _{GS(OFF)}	V _{DS} =5V, I _D =1μA	-	-0.6	-1.5	V
Drain Current	I _{DSS} (Note)	V _{DS} =5V, V _{GS} =0	150	-	320	μA
Foward Transfer Admittance	y _{fs}	V _{DS} =5V, V _{GS} =0, f=1kHz	0.4	1.2	-	mS
Input Capacitance	C _{iss}	V _{DS} =5V, V _{GS} =0, f=1MHz	-	3.5	-	pF
Reverse Transfer Capacitance	C _{rss}	V _{DS} =5V, V _{GS} =0, f=1MHz	-	0.65	-	pF

Note : I_{DSS} Classification Y(1):150~240, GR(2):210~320

Marking



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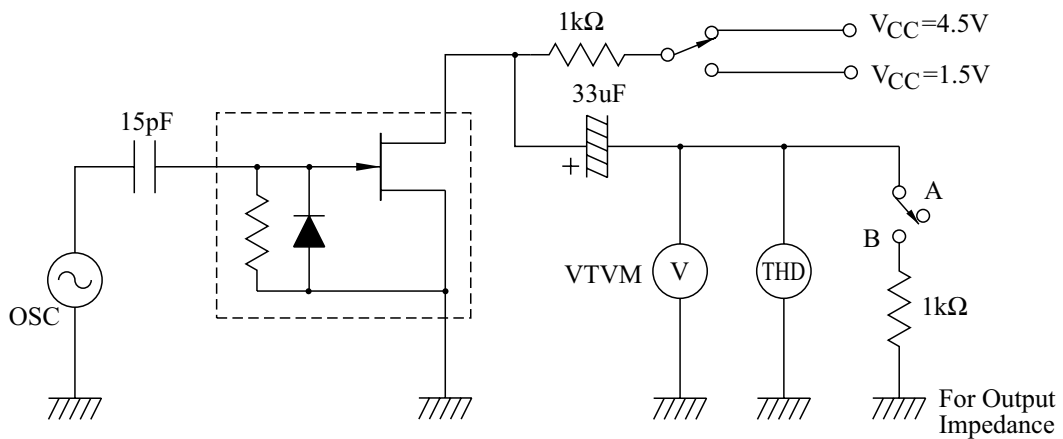
ELECTRICAL CHARACTERISTICS

($T_a=25^\circ\text{C}$, $V_{CC}=4.5\text{V}$, $R_L=1\text{k}\Omega$, $C_{in}=15\text{pF}$, See Specified Test Circuit.)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Voltage Gain	G_V	$V_{in}=10\text{mV}$, $f=1\text{kHz}$	-	-3.0	-	dB
Reduced Voltage Characteristic	$\angle G_{VV}$	$V_{in}=10\text{mV}$, $f=1\text{kHz}$ $V_{CC}=4.5\text{V} \rightarrow 1.5\text{V}$	-	-1.2	-4.0	dB
Frequency Characteristic	$\angle G_{VF}$	$f=1\text{kHz} \sim 110\text{Hz}$	-	-	-1.0	dB
Input Resistance	Z_{in}	$f=1\text{kHz}$	25	-	-	$\text{M}\Omega$
Output Resistance	Z_O	$f=1\text{kHz}$	-	-	700	Ω
Total Harmonic Distortion	THD	$V_{in}=30\text{mV}$, $f=1\text{kHz}$	-	1.0	-	%
Output Noise Voltage	V_{NO}	$V_{in}=0$, A curve	-	-	-110	dB

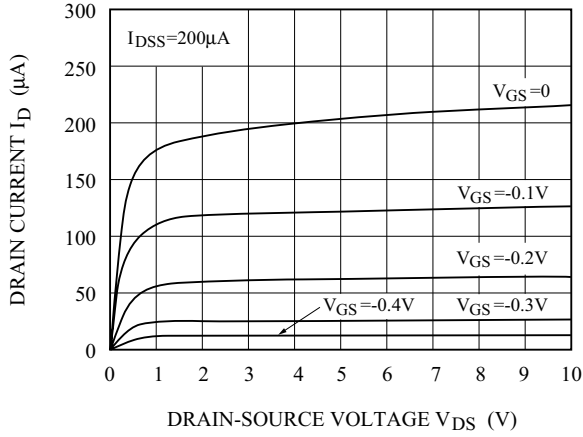
SPECIFIED TEST CIRCUIT

- Voltage gain.
- Frequency Characteristic.
- Distortion.
- Reduced Voltage Characteristic.

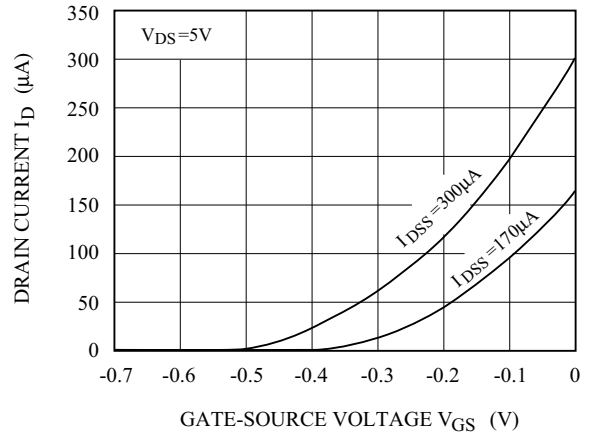


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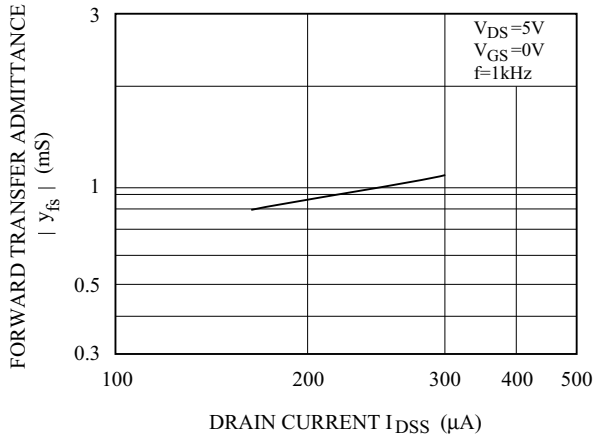
$I_D - V_{DS}$



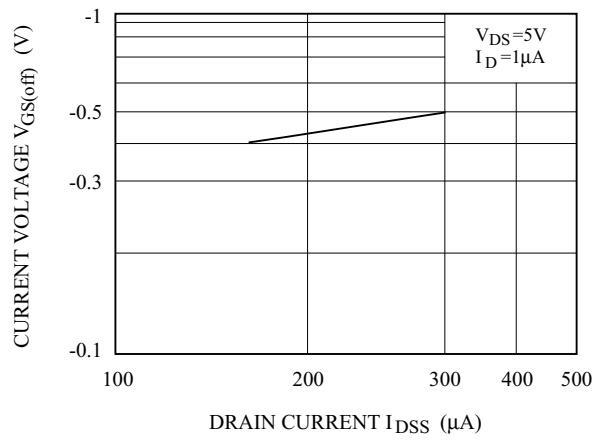
$I_D - V_{GS}$



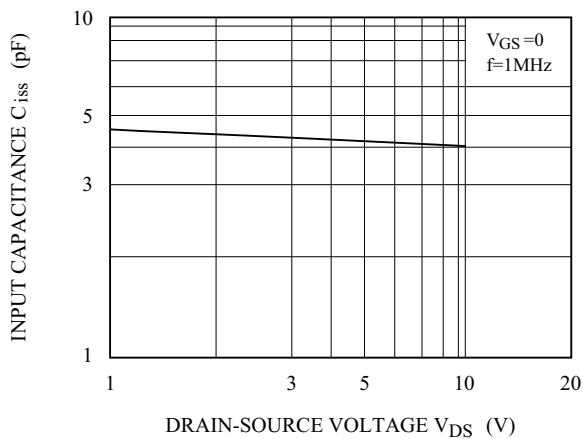
$|y_{fs}| - I_{DSS}$



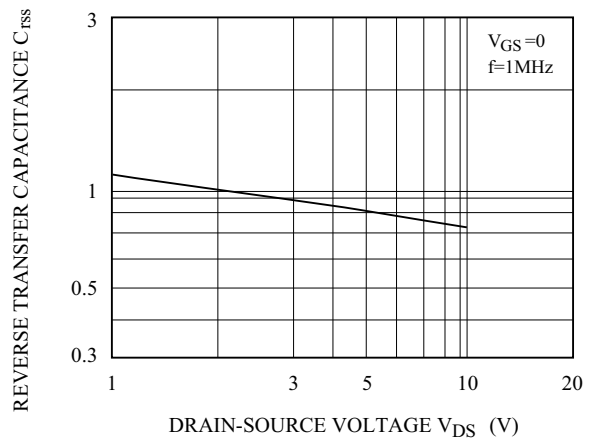
$V_{GS(off)} - I_{DSS}$



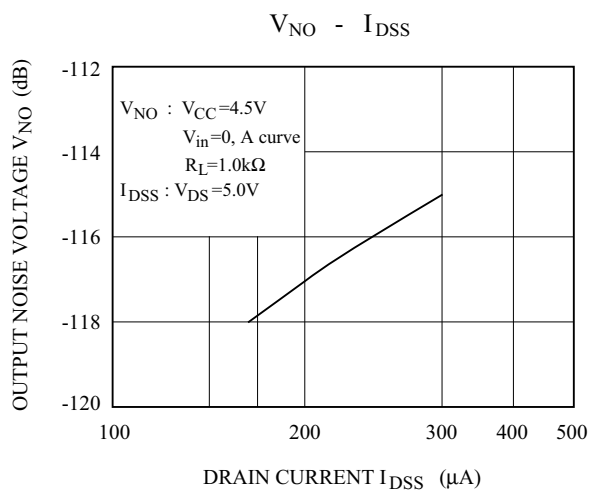
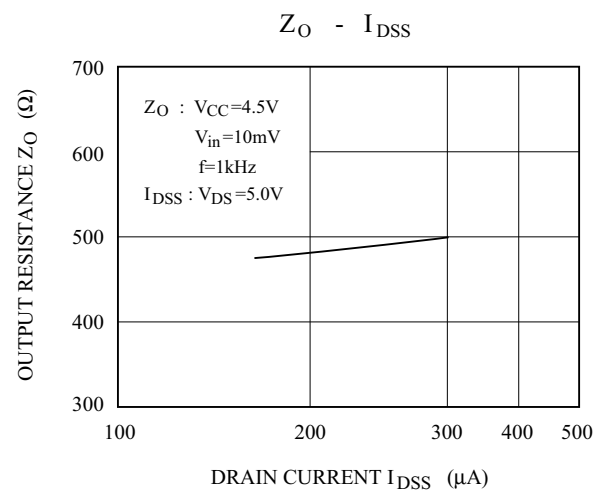
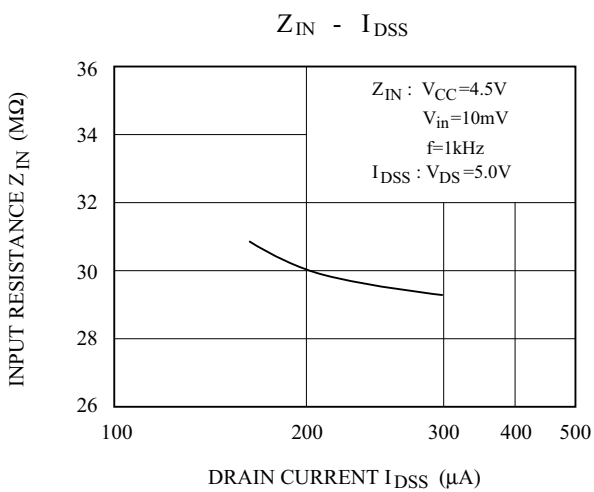
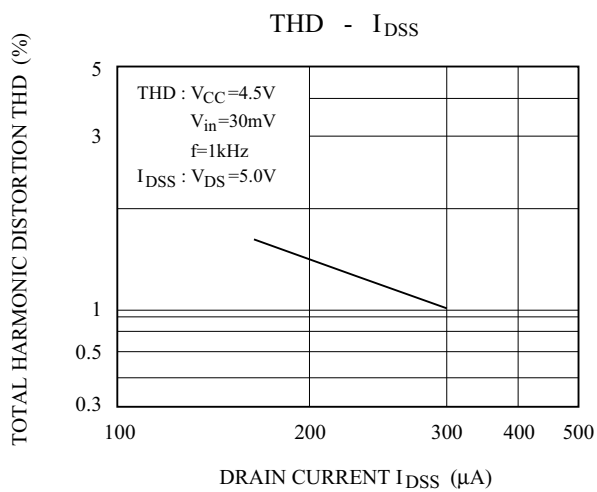
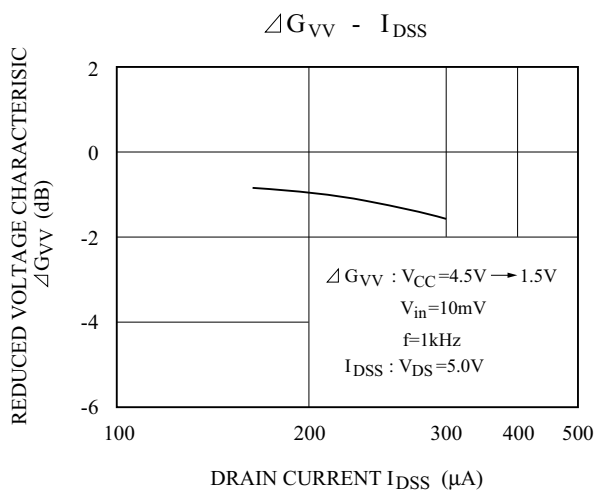
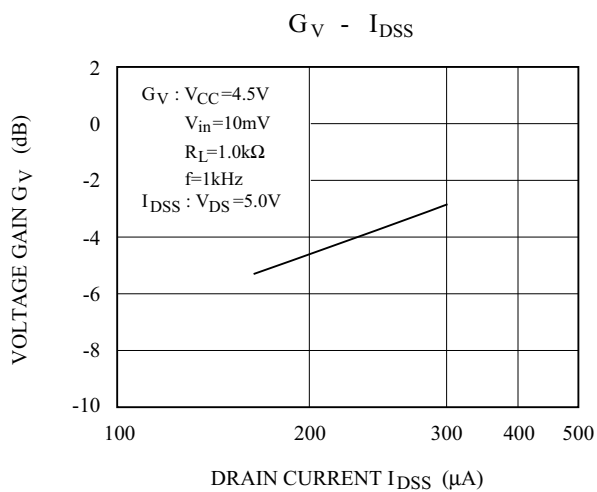
$C_{iss} - V_{DS}$



$C_{rss} - V_{DS}$



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