

PRELIMINARY
 Notices: This is not a final specification.
 Some parametric limits are subject to change.

FIELD-EFFECT TRANSISTOR

2SK3536

ELECTRET CONDENSER MICROPHONE APPLICATION
 N CHANNEL JUNCTION TYPE

DESCRIPTION

2SK3536 is a super mini package resin sealed silicon N channel junction type FET.

Since excellent transient characteristics, high $|Y_{fs}|$ and a super-thin flat lead type package, it is the optimum as an electret condenser microphone use.

FEATURE

- Super-thin flat lead type package.
 $t=0.45\text{mm}$
- High $|Y_{fs}|$
- Excellent transient characteristics

APPLICATION

Electret condenser microphone application

MAXIMUM RATINGS($T_a=25^\circ\text{C}$)

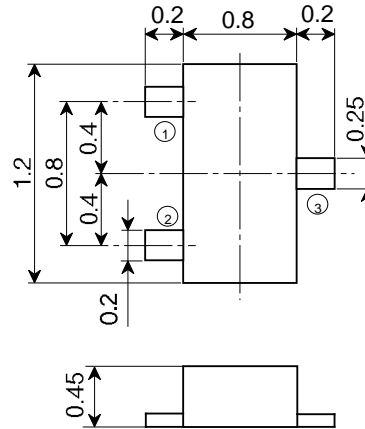
Symbol	Parameter	Ratings	Unit
V_{DS}	Drain to Source Voltage	20	V
V_{GD}	Gate to Drain Voltage	-20	V
I_D	Drain Current	10	mA
I_G	Gate Current	10	mA
P_T	Total allowable dissipation($T_a=25^\circ\text{C}$)		mW
T_{ch}	Channel temperature	+125	
T_{stg}	Storage temperature	-55 ~ +125	

ELECTRICAL CHARACTERISTICS($T_a=25^\circ\text{C}$)

Symbol	Parameter	Test conditions	Limits			Unit
			Min	Typ	Max	
I_{DSS}	Drain current	$V_{DS}=5\text{V}, V_{GS}=0\text{V}$	40		600	μA
$V_{GS(OFF)}$	Cut off voltage	$V_{DS}=5\text{V}, I_D=1.0\mu\text{A}$	-0.1		-1.0	V
$ Y_{fs} $	Forward transfer admittance	$V_{DS}=5\text{V}, V_{GS}=0\text{V}, f=1\text{KHz}$	350			μS
C_{iss}	Input capacitance	$V_{DS}=5\text{V}, V_{GS}=0\text{V}, f=1\text{MHz}$		7.0		pF
NV	Noise voltage			1.8	3.0	μV

OUTLINE DRAWING

Unit:mm



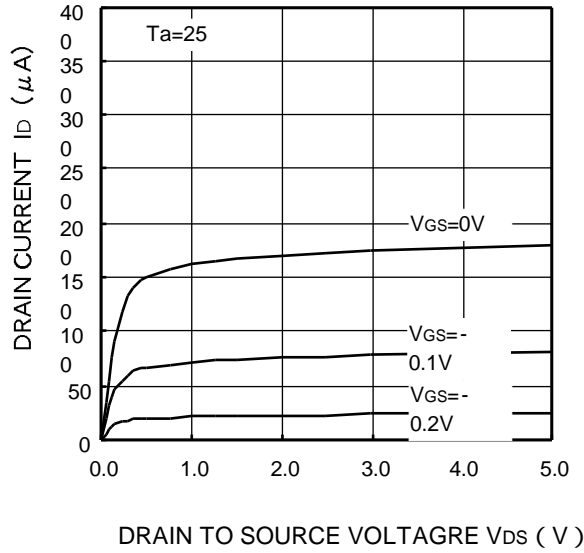
TERMINAL CONNECTOR

- ① : DRAIN
 ② : SOURCE
 ③ : GATE
- JEITA :

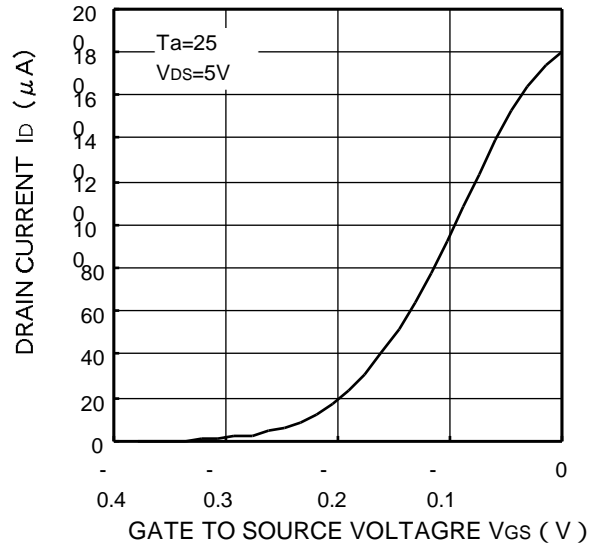
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COMMON SOURCE OUTPUT

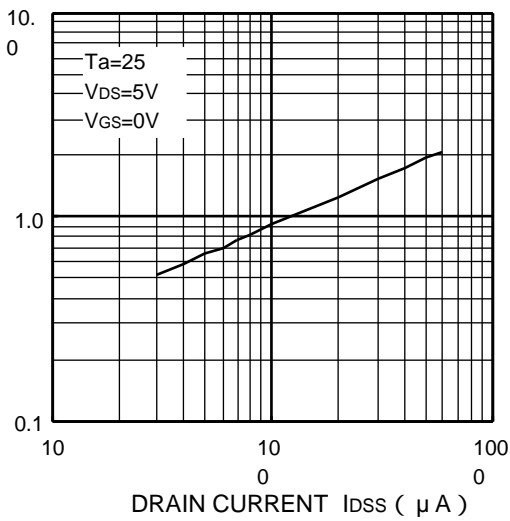


COMMON SOURCE TRANSFER

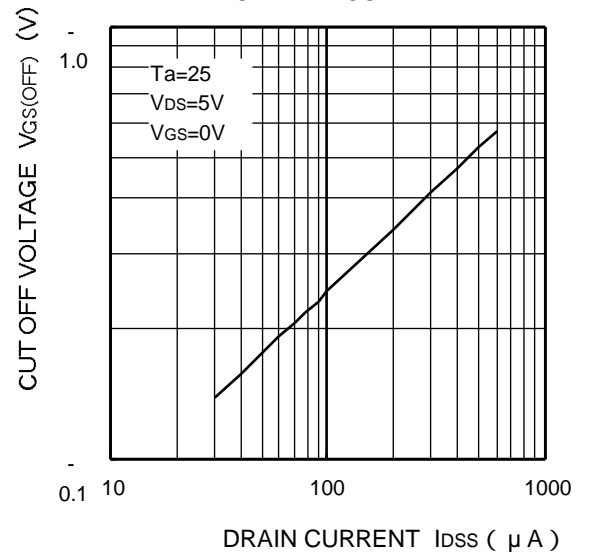


FORWARD TRANSFER ADMITTANCE | Y_{fs} | (mS)

FORWARD TRANSFER ADMITTANCE VS. DRAIN CURRENT



CUT OFF VOLTAGE VS. DRAIN CURRENT





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