

2SK433

FOR LOW FREQUENCY AMPLIFY APPLICATION
N CHANNEL JUNCTION TYPE

DESCRIPTION

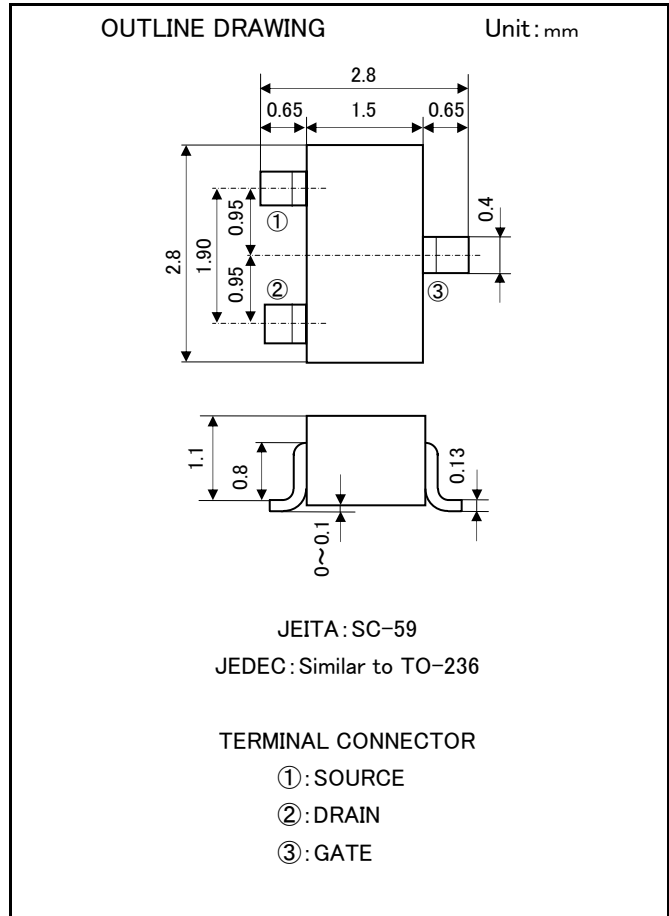
2SK433 is a super mini outline resin sealed N channel junction type FET. It is designed for low frequency voltage amplify, application and analog switch application.

FEATURE

- Small type for mounting.
- High $|y_{fs}|$ $|y_{fs}| = 3\text{mS (typ)}$
- Low $R_{DS(ON)}$ $R_{DS(ON)} = 250\ \Omega$ (typ)

APPLYCATION

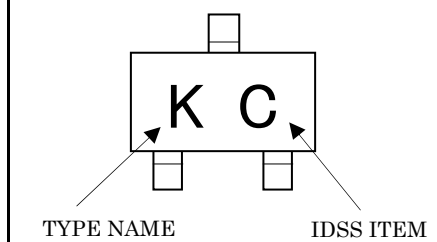
General purpose voltage amplify, analog switch circuit for stereo, cassette deck, VTR.



MAXIMUN RATINGS (Ta=25°C)

Symbol	Parameter	Ratings	Unit
V_{GD0}	Gate to Drain voltage	-50	V
I_G	Gate current	10	mA
P_T	Total allowable dissipation	150	mW
T_{ch}	Channel temperature	+150	°C
T_{stg}	Storage temperature	-55~+150	°C

MARKING



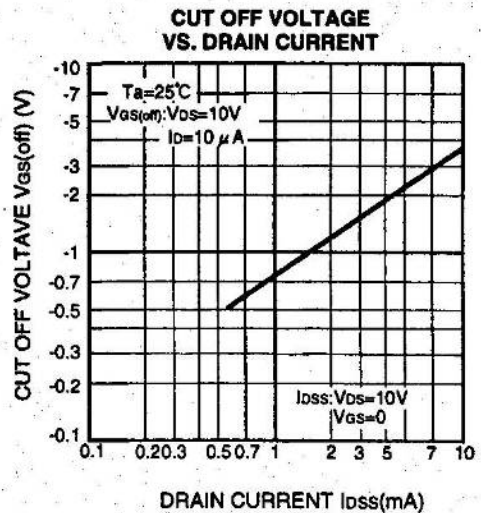
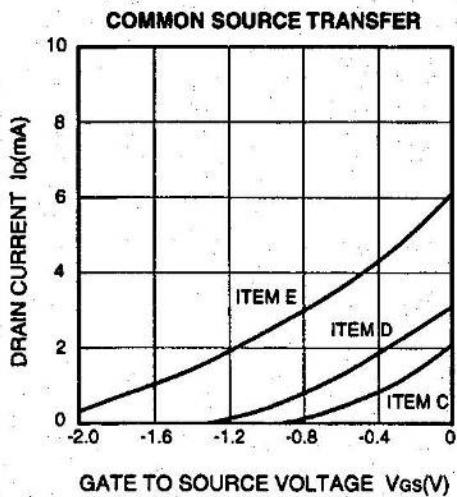
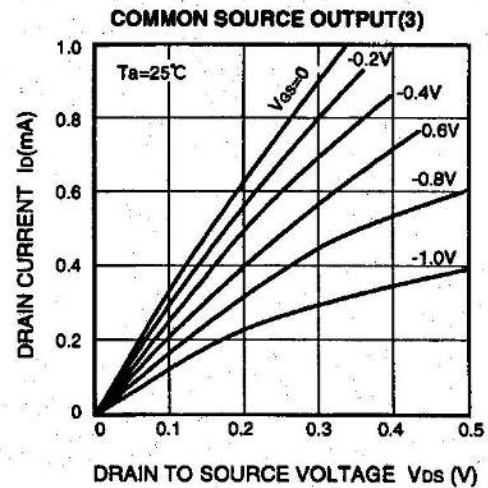
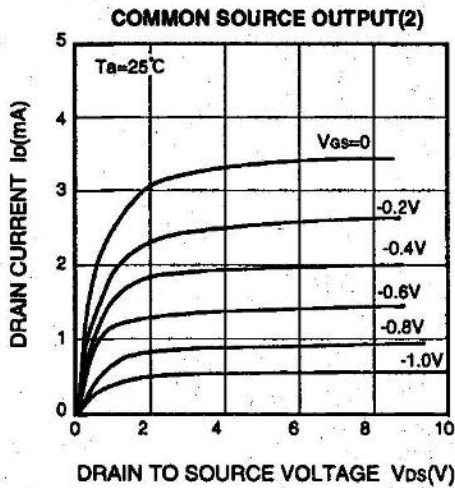
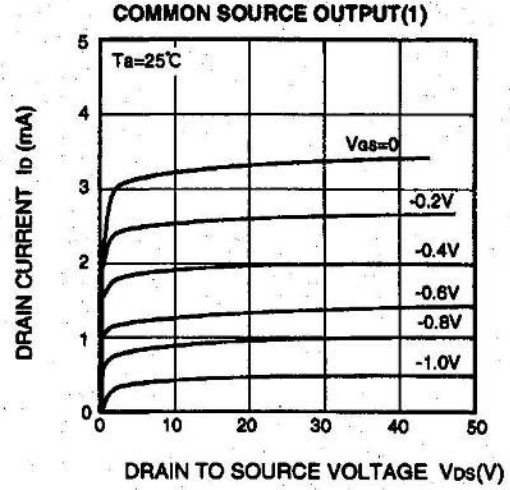
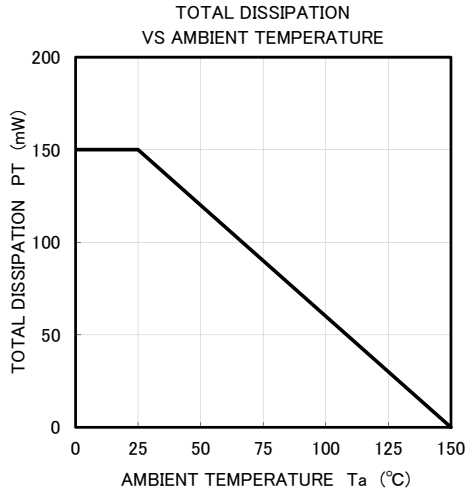
ELECTRICAL CHARACTERISTICS (Ta=25°C)

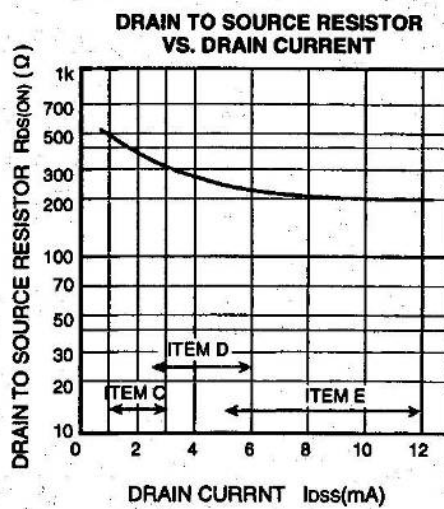
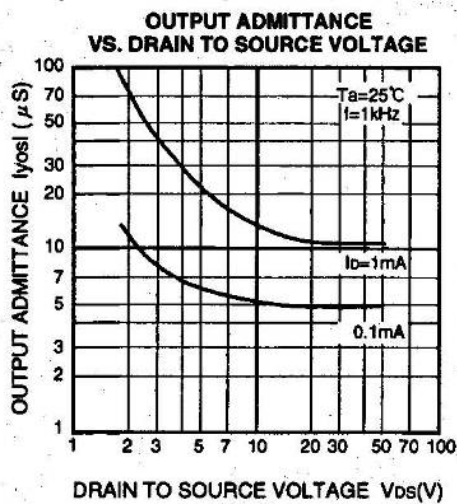
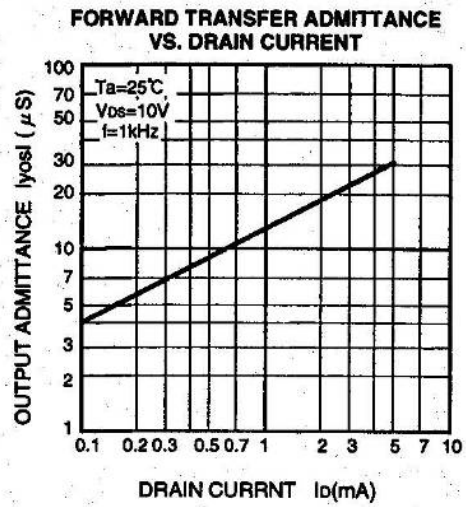
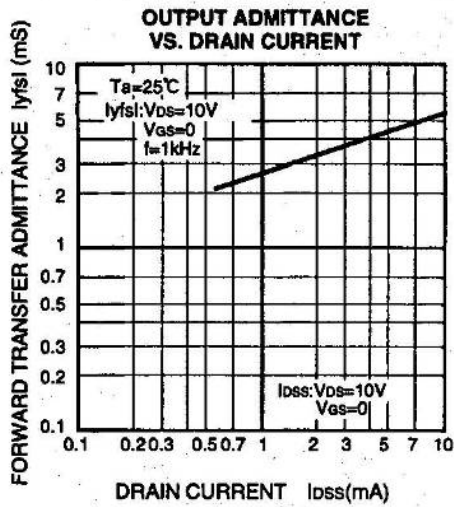
Symbol	Parameter	Test conditions	Limits			Unit
			Min	Typ	Max	
$V_{(BR)GD0}$	Gate to Drain breakdown voltage	$I_G = -10\ \mu\text{A}$, $I_D = 0\text{A}$	-50	-	-	V
I_{GSS}	Gate leakage current	$V_{GS} = -30\text{V}$, $V_{DS} = 0\text{V}$	-	-	-1	nA
I_{DSS}^*	Drain current	$V_{DS} = 10\text{V}$, $V_{GS} = 0\text{V}$	0.6	-	12	mA
$V_{GS(OFF)}$	Cut off voltage	$V_{DS} = 10\text{V}$, $I_D = 10\ \mu\text{A}$	-0.3	-1.5	-6.0	V
$ y_{fs} $	Forward transfer admittance	$V_{DS} = 10\text{V}$, $V_{GS} = 0\text{V}$, $f = 1\text{kHz}$	1.0	3.0	-	mS
$ y_{os} $	Output admittance	$V_{DS} = 10\text{V}$, $V_{GS} = 0\text{V}$, $f = 1\text{kHz}$	-	10	-	mS
C_{iss}	Input capacitance	$V_{DS} = 10\text{V}$, $V_{GS} = 0\text{V}$, $f = 1\text{MHz}$	-	8	-	pF
C_{rss}	Feedback capacitance	$V_{DS} = 10\text{V}$, $V_{GS} = 0\text{V}$, $f = 1\text{MHz}$	-	1.5	-	pF
$R_{DS(ON)}$	Drain to Source resistor	$V_{DS} = 10\text{mVrms}$ (1kHz), $V_{GS} = 0\text{V}$, $I_{DSS} = 5\text{mA}$	-	250	-	Ω

* : It shows IDSS classification in right table.

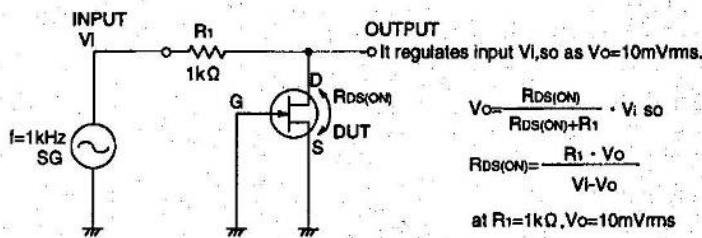
ITEM	B	C	D	E
$I_{DSS}(\text{mA})$	0.6~1.5	1.0~3.0	2.5~6.0	5.0~12

TYPICAL CHARACTERISTICS





DRAIN TO SOURCE RESISTOR $R_{ds(ON)}$ TEST CIRCUIT





Keep safety first in your circuit designs!

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