

2SK2881

FOR LOW FREQUENCY AMPLIFY APPLICATION
N CHANNEL JUNCTION TYPE MICRO

DESCRIPTION

2SK2881 is a small type resin sealed N channel junction type FET.
It is especially designed for low frequency low noise amplify application.

FEATURE

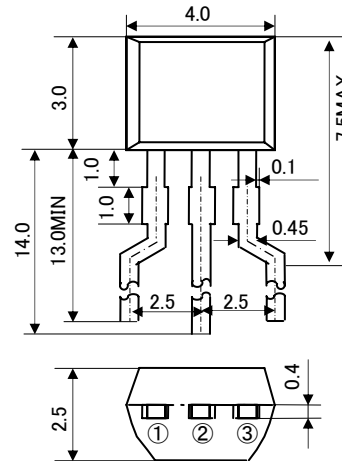
- Low noise figure $NF=1dB$ (type)
($V_{DS}=10V, I_D=1mA, R_G=1k\Omega, f=100Hz$)
- High $|y_{fs}|$ $|y_{fs}|=8mS$ (typ)
($V_{DS}=10V, I_D=1mA, f=1kHz$)
- Low $R_{DS(ON)}$ $R_{DS(ON)}=70\Omega$ (typ)
- High voltage $V_{GDO}=V_{GSO}=-50V$

APPLYCATION

Low frequency voltage amplify, analog switch

OUTLINE DRAWING

Unit : mm



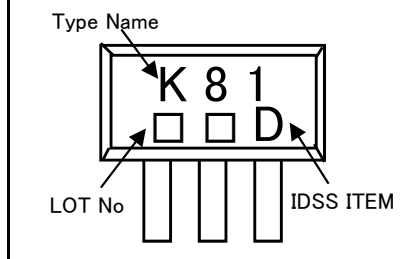
TERMINAL CONNECTOR

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

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

Symbol	Parameter	Ratings	Unit
V_{GDO}	Gate to Drain voltage	-50	V
V_{GSO}	Gate to Source voltage	-50	V
I_D	Drain current	20	mA
I_G	Gate current	10	mA
P_T	Total allowable dissipation	450	mW
T_{ch}	Channel temperature	+150	$^\circ C$
T_{stg}	Storage temperature	-55~+150	$^\circ C$

MARKING



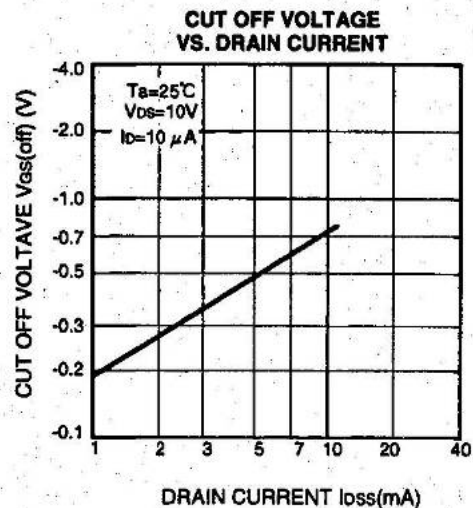
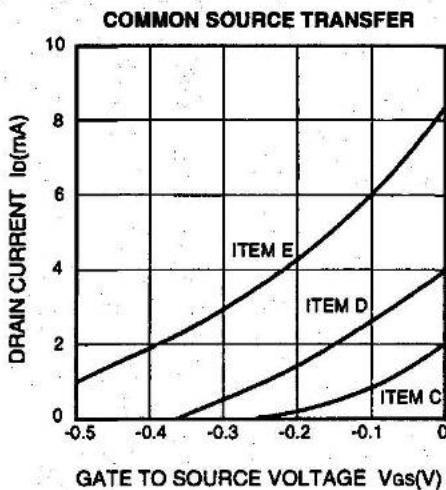
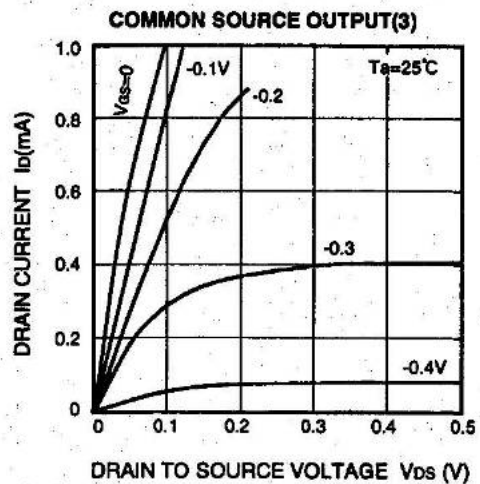
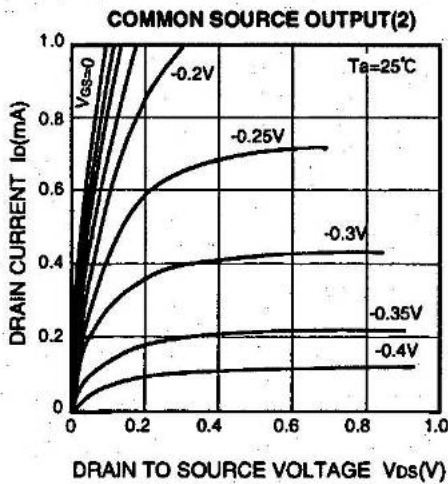
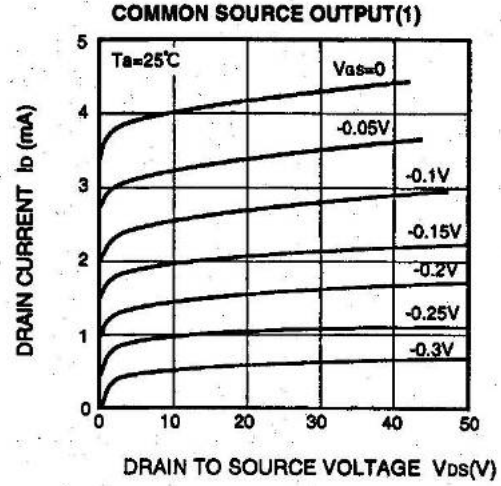
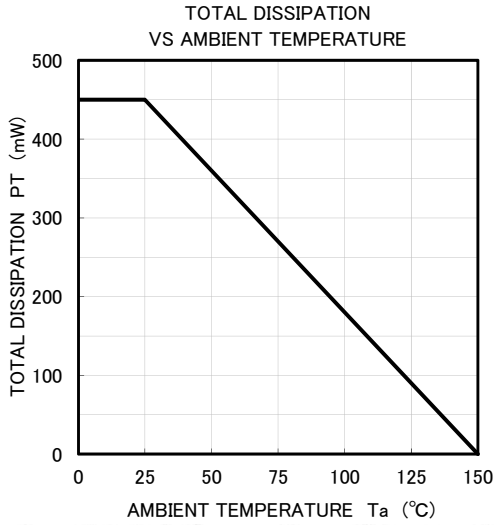
ELECTRICAL CHARACTERISTICS ($T_a=25^\circ C$)

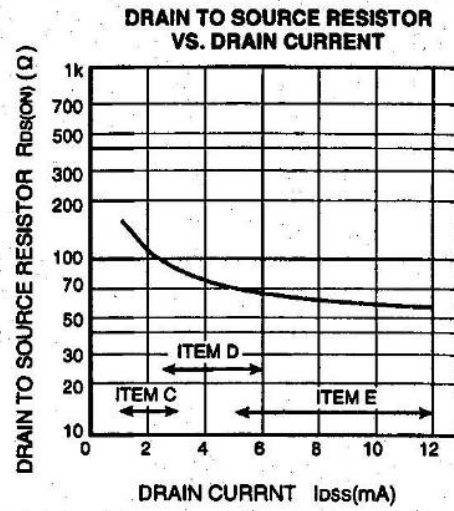
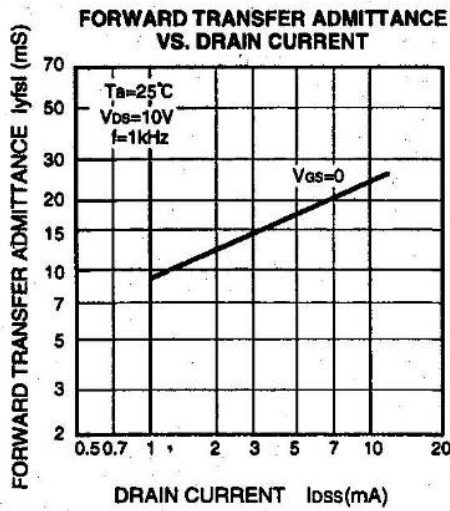
Symbol	Parameter	Test conditions	Limits			Unit
			Min	Typ	Max	
I_{GSS}	Gate leakage current	$V_{GS}=-30V, V_{DS}=0V$	-	-	-1	nA
$I_{DSS} *$	Drain current	$V_{DS}=10V, V_{GS}=0V$	1	4	12	mA
$V_{GS(OFF)}$	Cut off voltage	$V_{DS}=10V, I_D=10\mu A$	-0.1	-	-3.0	V
$ y_{fs} $	Forward transfer admittance	$V_{DS}=10V, V_{GS}=0V, f=1kHz$	6.0	15	-	mS
$ y_{fs} $	Forward transfer admittance	$V_{DS}=10V, I_D=1mA, f=1kHz$	-	8	-	mS
$ y_{os} $	Output admittance	$V_{DS}=10V, I_D=1mA, f=1kHz$	-	10	-	μS
C_{iss}	Input capacitance	$V_{DS}=10V, V_{GS}=0V, f=1MHz$	-	20	-	pF
NF	Noise figure	$V_{DS}=10V, I_D=1mA, f=1kHz, f=100Hz, R_G=1k\Omega$	-	1.0	2.5	dB
$R_{DS(ON)}$	Drain to Source resistor	$V_{DS}=10mV_{rms}(1kHz), V_{GS}=0V, I_{DSS}=5mA$	-	70	-	Ω

* : It shows I_{DSS} classification in right table.

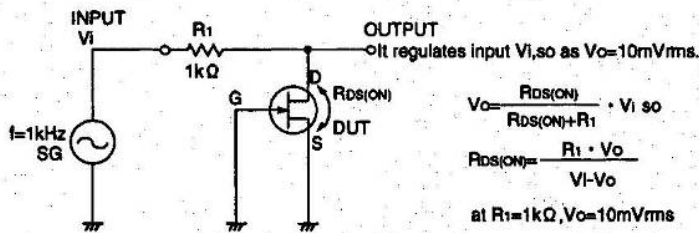
ITEM	C	D	E
$I_{DSS}(mA)$	1.0~3.0	2.5~6.0	5.0~12

TYPICAL CHARACTERISTICS





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





Keep safety first in your circuit designs!

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