〈FIELD-EFFECT TRANSISTOR〉

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.

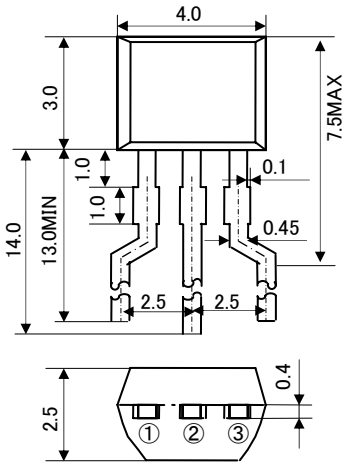
FEATURE

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

APPLYCATION

Low frequency voltage amplify, analog switch

OUTLINE DRAWING　Unit: mm



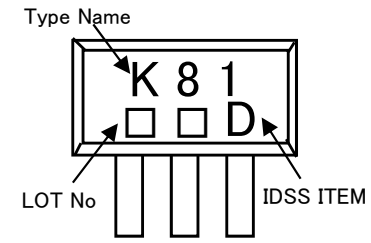
TERMINAL CONNECTOR
①: SOURCE
②: GATE
③: DRAIN

JEITA: −
JEDEC: −

MAXIMUN RATINGS(Ta=25℃)

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
Tch	Channel temperature	+150	℃
Tstg	Storage temperature	−55～+150	℃

MARKING



ELECTRICAL CHARACTERISTICS(Ta=25℃)

Symbol	Parameter	Test conditions	Limits			Unit
			Min	Typ	Max	
IGSS	Gate leakage current	V_{GS}=−30V, V_{DS}=0V	−	−	−1	nA
IDSS ＊	Drain current	V_{DS}=10V, V_{GS}=0V	1	4	12	mA
$V_{GS(OFF)}$	Cut off voltage	V_{DS}=10V, I_D=10μA	−0.1	−	−3.0	V
| yfs |	Forward transfer admittance	V_{DS}=10V, V_{GS}=0V, f=1kHz	6.0	15	−	mS
| yfs |	Forward transfer admittance	V_{DS}=10V, I_D=1mA, f=1kHz	−	8	−	mS
| yos |	Output admittance	V_{DS}=10V, I_D=1mA, f=1kHz	−	10	−	μS
Ciss	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=1kΩ	−	1.0	2.5	dB
$R_{DS(ON)}$	Drain to Source resistor	V_{DS}=10mVrms(1kHz), V_{GS}=0V, I_{DSS}=5mA	−	70	−	Ω

＊: It shows IDSS classification in right table.

ITEM	C	D	E
IDSS(mA)	1.0～3.0	2.5～6.0	5.0～12

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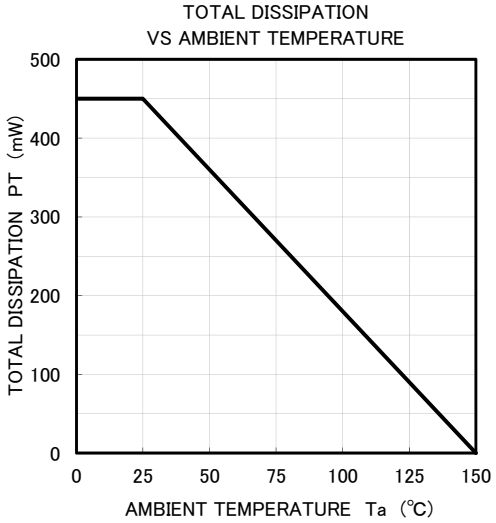
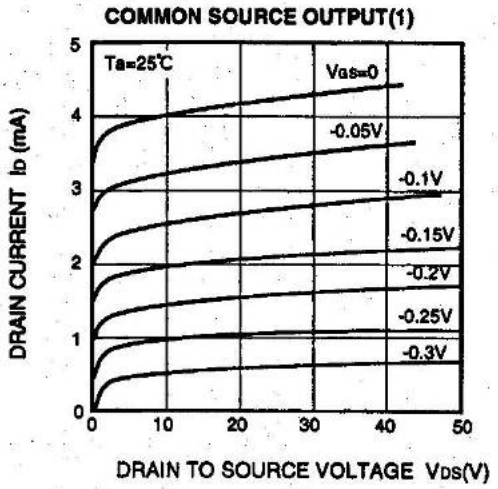
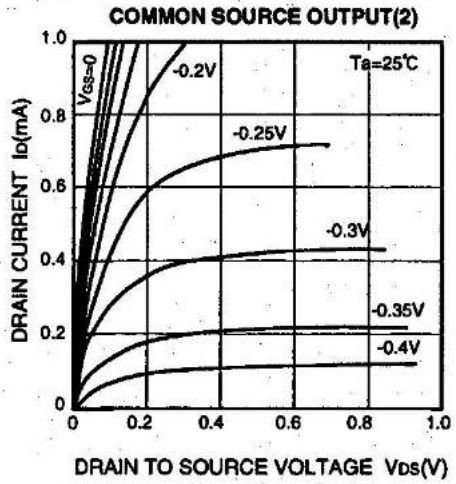
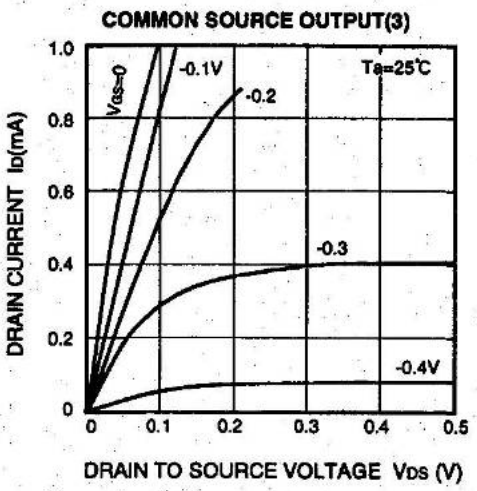
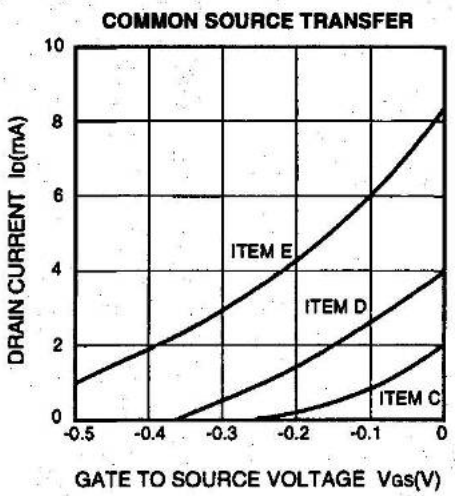
TYPICAL CHARACTERISTICS

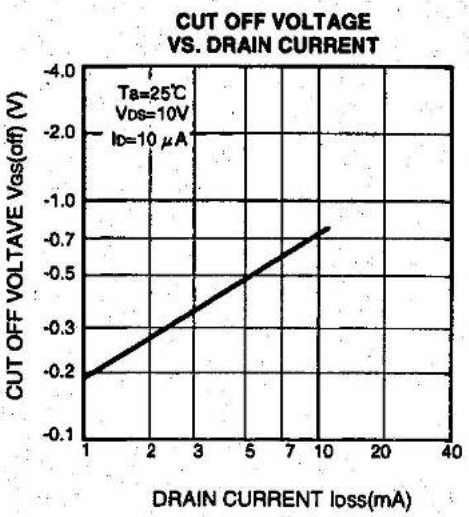












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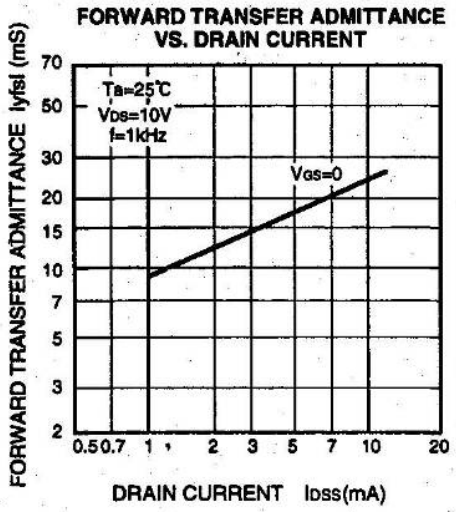
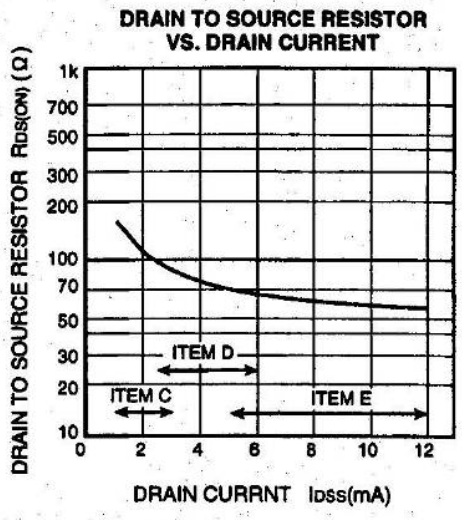
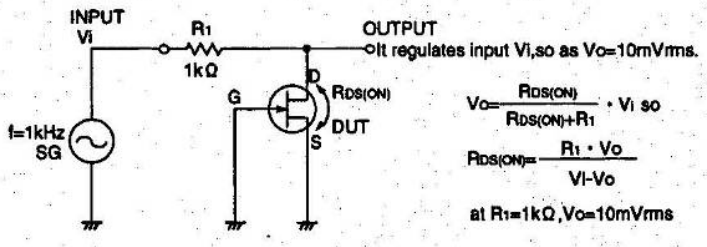




DRAIN TO SOURCE RESISTOR RDS(ON) TEST CIRCUIT



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