

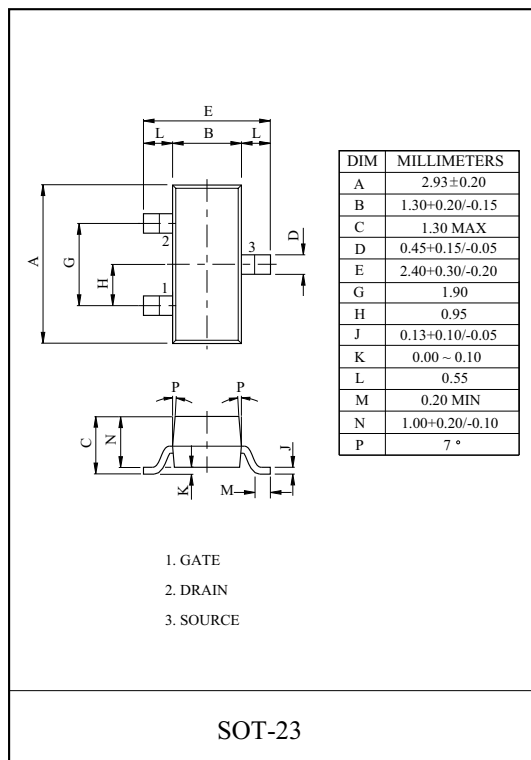
HIGH FREQUENCY APPLICATION.  
VHF BAND AMPLIFIER APPLICATION.

#### FEATURES

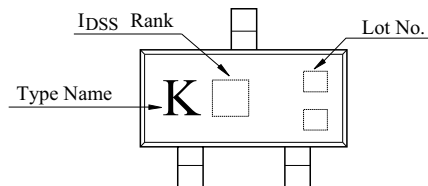
- Low Noise Figure :  $NF=2.5dB(Typ.)$  ( $f=100MHz$ ).
- High Forward Transfer Admittance.  
:  $|y_{fs}|=9mS(Typ.)$
- Extremely Low Reverse Transfer Capacitance.  
:  $C_{rss}=0.1pF(Typ.)$

#### MAXIMUM RATING ( $T_a=25^\circ C$ )

CHARACTERISTIC	SYMBOL	RATING	UNIT
Gate-Drain Voltage	$V_{GDO}$	-18	V
Gate Current	$I_G$	10	mA
Drain Power Dissipation	$P_D$	150	mW
Junction Temperature	$T_j$	150	$^\circ C$
Storage Temperature Range	$T_{stg}$	-55 ~ 150	$^\circ C$



#### Marking



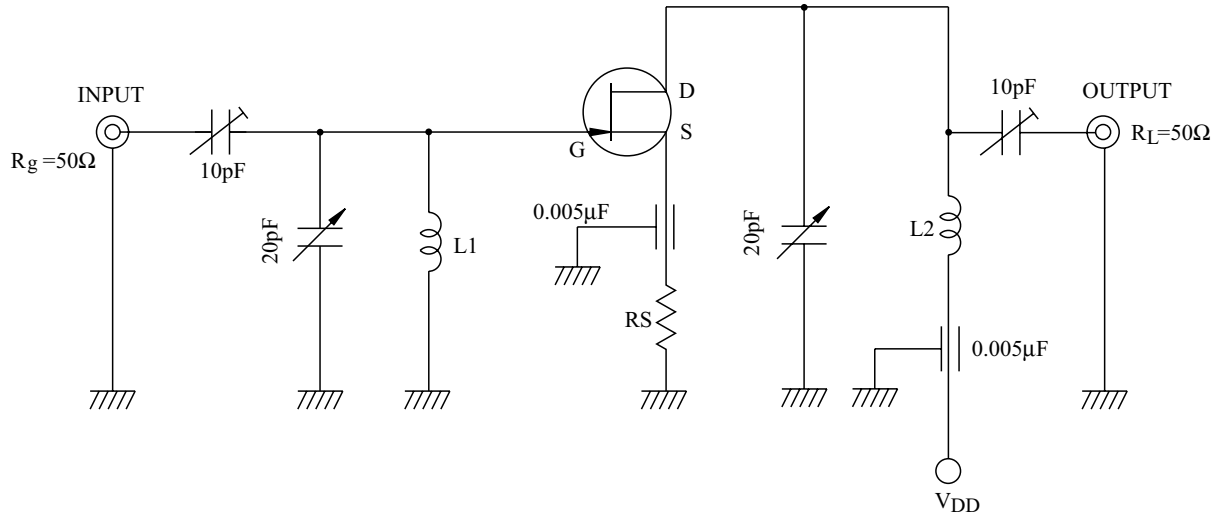
#### ELECTRICAL CHARACTERISTICS ( $T_a=25^\circ C$ )

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Gate Leakage Current	$I_{GSS}$	$V_{GS}=-0.5V, V_{DS}=0$	-	-	-10	nA
Gate-Drain Breakdown Voltage	$V_{(BR)GDO}$	$I_G=-100\mu A$	-18	-	-	V
Drain Current	$I_{DSS}$ (Note)	$V_{GS}=0, V_{DS}=10V$	1.0	-	15	mA
Gate-Source Cut-off Voltage	$V_{GS(OFF)}$	$V_{DS}=10V, I_D=1\mu A$	-0.4	-	-4.0	V
Forward Transfer Admittance	$ y_{fs} $	$V_{DS}=10V, V_{GS}=0, f=1kHz$	-	9	-	mS
Reverse Transfer Capacitance	$C_{rss}$	$V_{GD}=-10V, f=1MHz$	-	0.10	0.15	pF
Power Gain	$G_{PS}$	$V_{DD}=10V, f=100MHz$ (Fig.)	-	18	-	dB
Noise Figure	NF	$V_{DD}=10V, f=100MHz$ (Fig.)	-	2.5	3.5	dB

Note :  $I_{DSS}$  Classification O:1.0 ~ 3.0, Y:2.5 ~ 6.0,  
GR(G):5.0 ~ 10.0, BL(B):9.0 ~ 15.0

# KTK211

Fig. 100MHz  $G_{PS}$ , NF TEST CIRCUIT



L1 : 0.8mm $\Phi$  Ag PLATED Cu WIRE , 3 TURNS , 10mm ID , 10mm LENGTH.

L2 : 0.8mm $\Phi$  Ag PLATED Cu WIRE , 3.5 TURNS , 10mm ID , 10mm LENGTH.

KTK211 is measured at each group by changing  $R_S$ .

GROUP	$R_S$ ( $\Omega$ )
KTK211 - O	0
KTK211 - Y	$18 \Omega \pm 5\%$
KTK211 - GR	$100 \Omega \pm 5\%$
KTK211 - BL	$200 \Omega \pm 5\%$

