

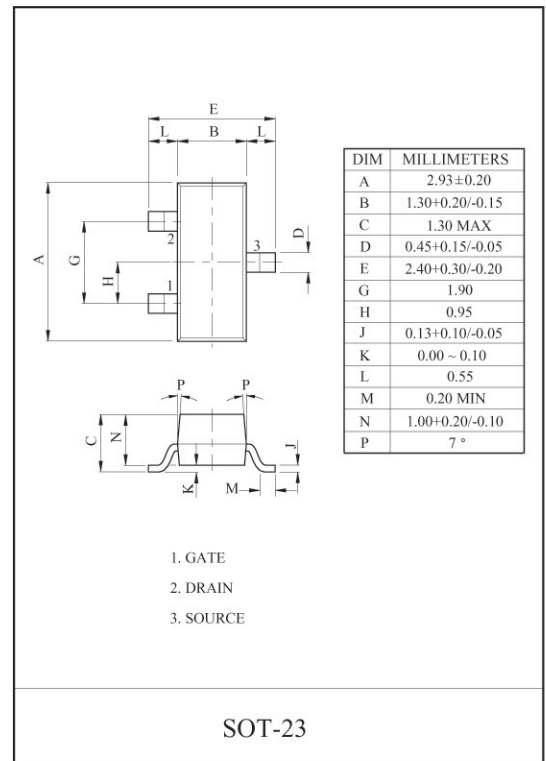
HIGH FREQUENCY APPLICATION.  
VHF BAND AMPLIFIER APPLICATION.

### FEATURES

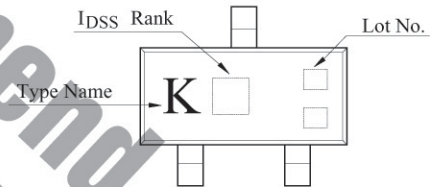
- Low Noise Figure : NF=2.5dB(Typ.) (f=100MHz).
- High Forward Transfer Admittance.  
:  $|y_{fs}| = 9\text{mS(Typ.)}$
- Extremely Low Reverse Transfer Capacitance.  
:  $C_{rss} = 0.1\text{pF(Typ.)}$

### MAXIMUM RATING (Ta=25°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	°C
Storage Temperature Range	$T_{stg}$	-55 ~ 150	°C



### Marking



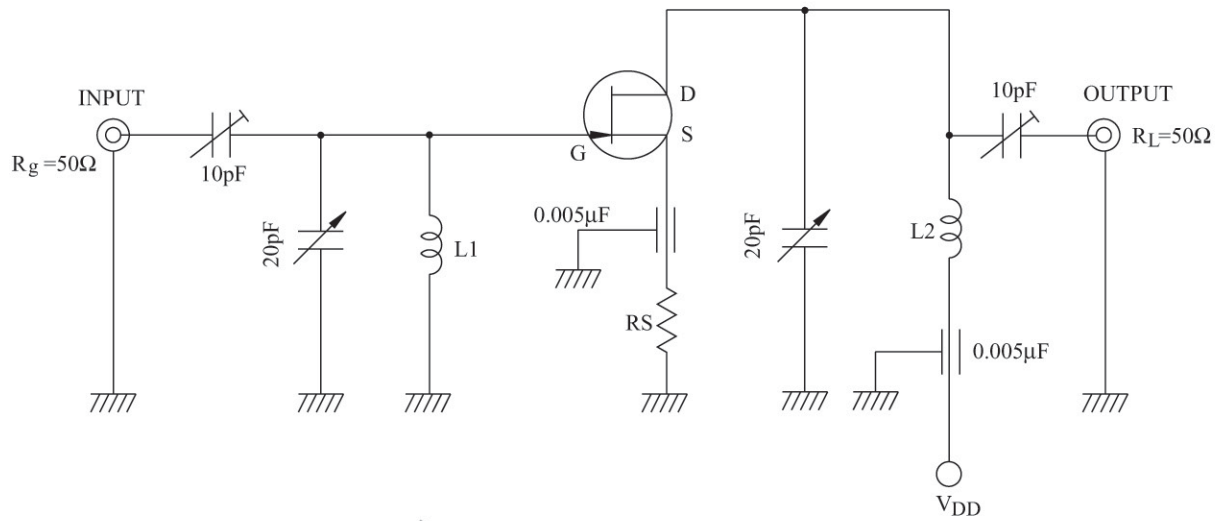
### ELECTRICAL CHARACTERISTICS (Ta=25°C)

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} $	$V_{DS} = 10V$ , $V_{GS} = 0$ , $f = 1\text{kHz}$	-	9	-	mS
Reverse Transfer Capacitance	$C_{rss}$	$V_{GD} = -10V$ , $f = 1\text{MHz}$	-	0.10	0.15	pF
Power Gain	$G_{PS}$	$V_{DD} = 10V$ , $f = 100\text{MHz}$ (Fig.)	-	18	-	dB
Noise Figure	NF	$V_{DD} = 10V$ , $f = 100\text{MHz}$ (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.

L1 : 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	$200\Omega \pm 5\%$

