

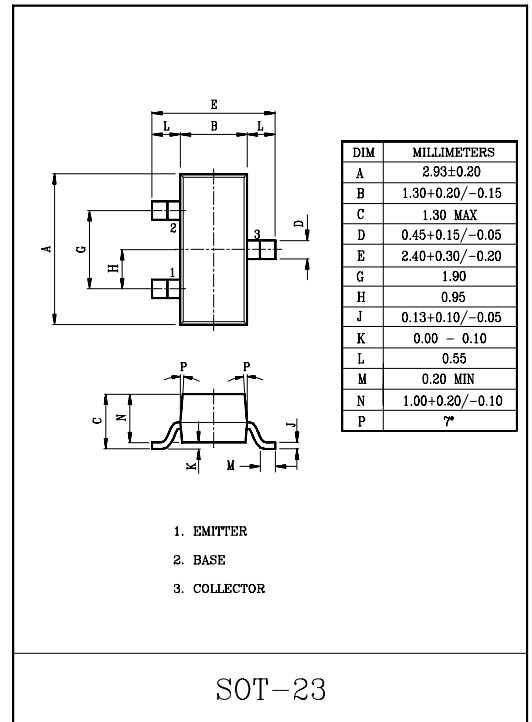
HIGH FREQUENCY LOW NOISE AMPLIFIER.  
VHF BAND AMPLIFIER APPLICATION.

### FEATURES

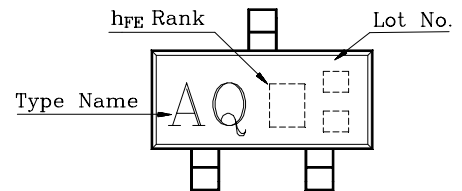
- Small Reverse Transfer Capacitance :  $C_{re}=0.7\text{pF(Typ.)}$
- Low Noise Figure :  $NF=2.5\text{dB(Typ.)}$  ( $f=100\text{MHz}$ ).

### MAXIMUM RATINGS ( $T_a=25^\circ\text{C}$ )

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	$V_{CBO}$	40	V
Collector-Emitter Voltage	$V_{CEO}$	30	V
Emitter-Base Voltage	$V_{EBO}$	4	V
Collector Current	$I_C$	20	mA
Emitter Current	$I_E$	-20	mA
Collector Power Dissipation	$P_C$	150	mW
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	-55 ~ 150	$^\circ\text{C}$



### Marking



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

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	$I_{CBO}$	$V_{CB}=18\text{V}, I_E=0$	-	-	0.5	$\mu\text{A}$
Emitter Cut-off Current	$I_{EBO}$	$V_{EB}=4\text{V}, I_C=0$	-	-	0.5	$\mu\text{A}$
DC Current Gain	$h_{FE}(\text{Note})$	$V_{CE}=6\text{V}, I_C=1\text{mA}$	40	-	200	
Reverse Transfer Capacitance	$C_{re}$	$V_{CE}=6\text{V}, f=1\text{MHz}$	-	0.7	-	pF
Transition Frequency	$f_T$	$V_{CE}=6\text{V}, I_C=1\text{mA}$	-	550	-	MHz
Collector-Base Time Constant	$C_c \cdot r_{bb}$	$V_{CE}=6\text{V}, I_E=-1\text{mA}, f=30\text{MHz}$	-	-	30	pS
Noise Figure	NF	$V_{CE}=6\text{V}, I_E=-1\text{mA}$ $f=100\text{MHz}$ (Fig.)	-	2.5	5.0	dB
Power Gain	$G_{pe}$		15	18	-	

Note :  $h_{FE}$  Classification R:40~80 , O:70~140 , Y:100~200

