

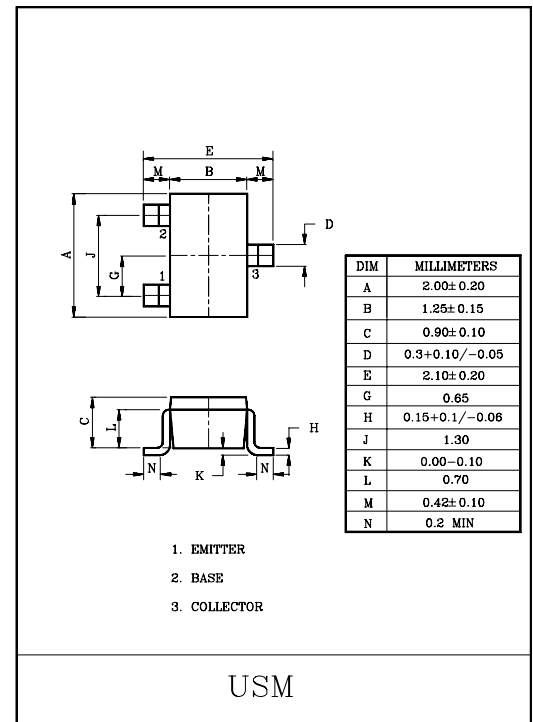
HIGH FREQUENCY LOW NOISE AMPLIFIER.
VHF BAND AMPLIFIER APPLICATION.

FEATURES

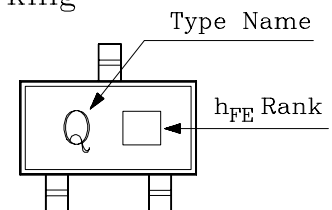
- Small Reverse Transfer Capacitance
: $C_{re}=0.7\text{pF(Typ.)}$
- Low Noise Figure : $\text{NF}=2.5\text{dB(Typ.)}$ ($f=100\text{MHz}$).

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	100	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55~150	$^\circ\text{C}$



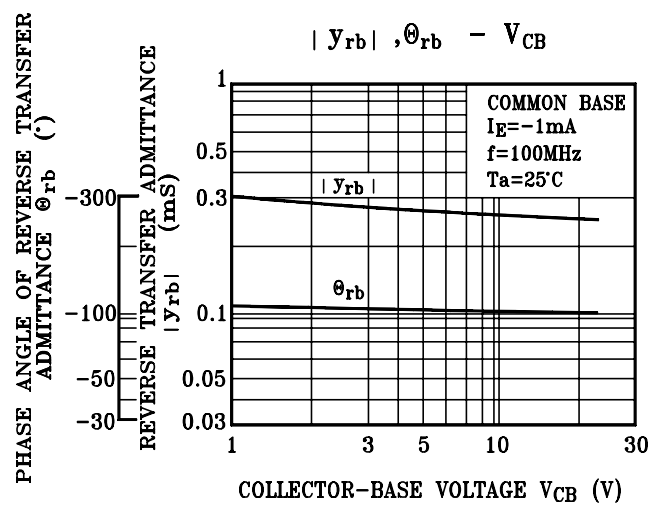
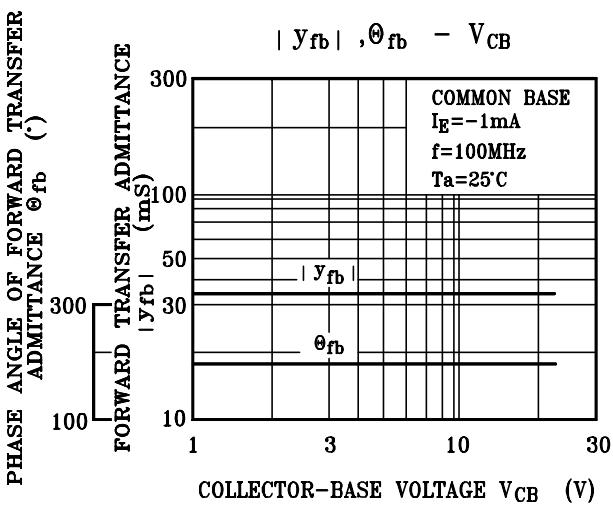
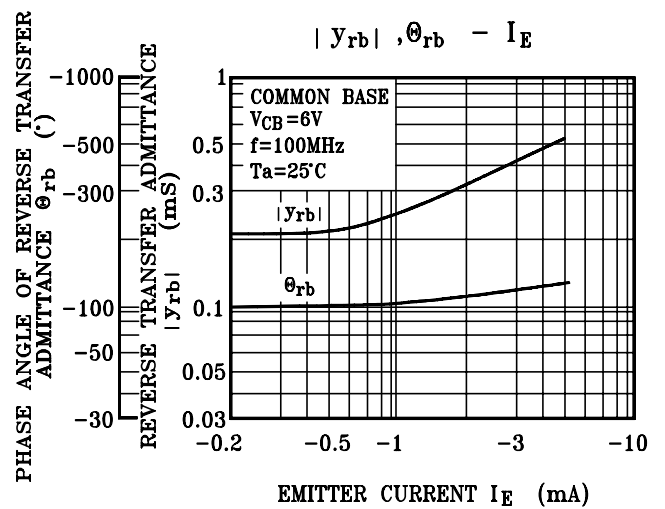
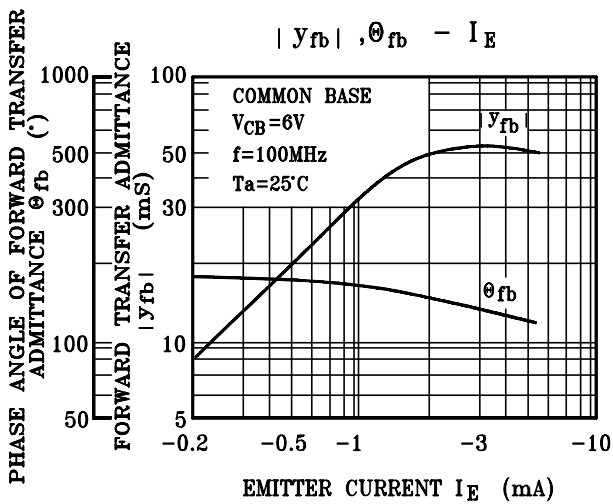
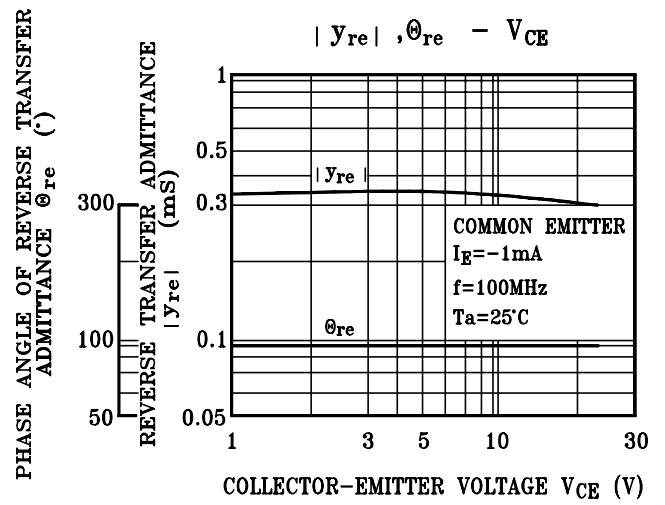
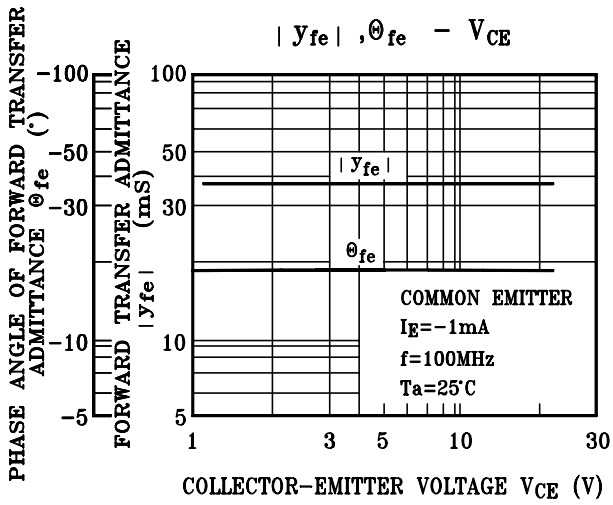
Marking



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	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=4\text{V}, I_C=0$	-	-	0.5	μA
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(1):40~80 , O(2):70~140 , Y(4):100~200



KTC4080

