

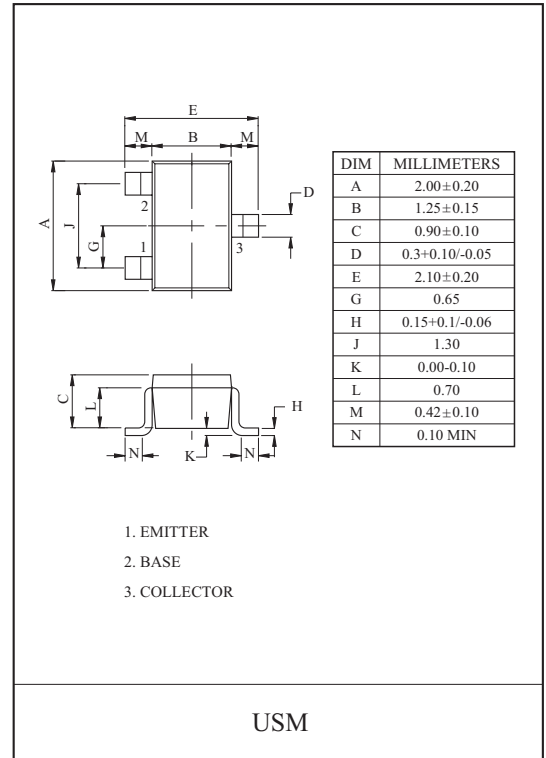
VHF/UHF WIDE BAND AMPLIFIER APPLICATION.

### FEATURES

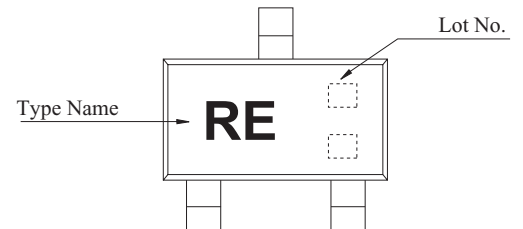
- Low Noise Figure, High Gain.
- $NF=1.4dB$ ,  $|S_{21e}|^2=12dB$  ( $f=1GHz$ ).

### MAXIMUM RATING (Ta=25 )

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	$V_{CBO}$	15	V
Collector-Emitter Voltage	$V_{CEO}$	6	V
Emitter-Base Voltage	$V_{EBO}$	1.5	V
Collector Current	$I_C$	50	mA
Collector Power Dissipation	$P_C$	100	mW
Junction Temperature	$T_j$	125	
Storage Temperature Range	$T_{stg}$	-55 125	



### Marking

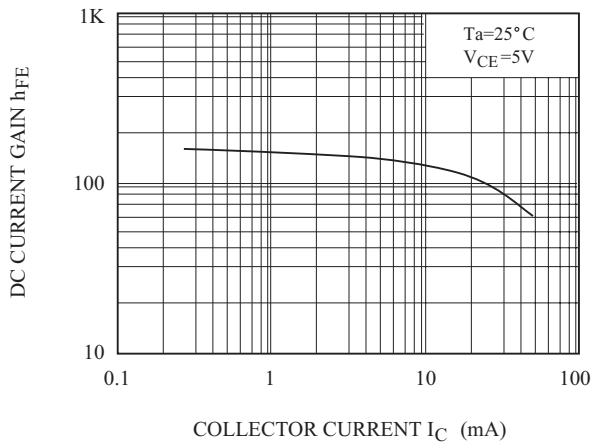


### ELECTRICAL CHARACTERISTICS (Ta=25 )

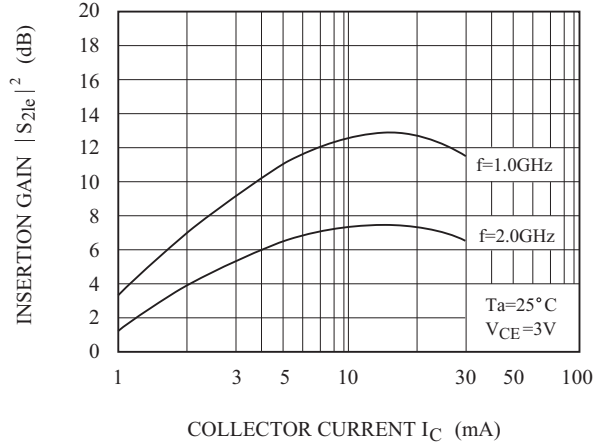
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	$I_{CBO}$	$V_{CB}=10V, I_E=0$	-	-	1	$\mu A$
Emitter Cut-off Current	$I_{EBO}$	$V_{EB}=1V, I_C=0$	-	-	1	$\mu A$
DC Current Gain	$h_{FE}$	$V_{CE}=5V, I_C=10mA$	50	-	250	
Collector Output Capacitance	$C_{ob}$	$V_{CB}=5V, I_E=0, f=1MHz$	-	-	1.0	pF
Transition Frequency	$f_T$	$V_{CE}=5V, I_C=10mA$	5	8	-	GHz
Insertion Gain	$ S_{21e} ^2$	$V_{CE}=5V, I_C=10mA, f=1GHz$	9	12	-	dB
Noise Figure	NF	$V_{CE}=5V, I_C=5mA, f=1GHz$	-	1.4	-	dB

# KTC3780U

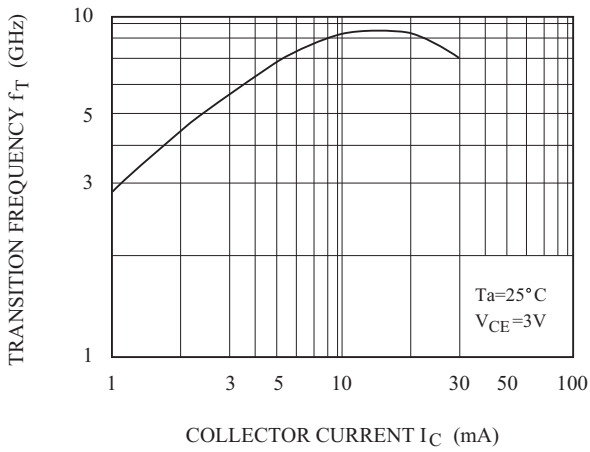
$h_{FE} - I_C$



$|S_{21e}|^2 - I_C$



$f_T - I_C$



$|S_{21e}|^2 - I_C$

