

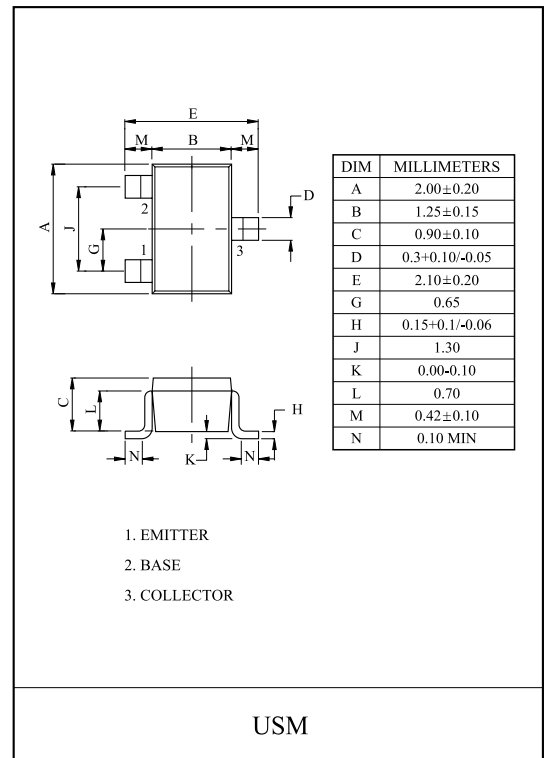
VHF/UHF WIDE BAND AMPLIFIER APPLICATION.

FEATURES

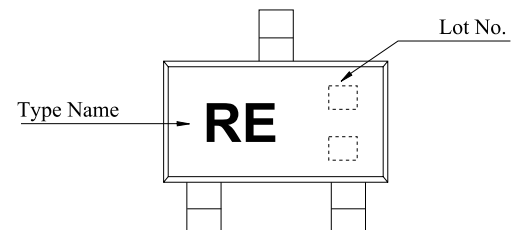
- Low Noise Figure, High Gain.
- $NF=1.4dB$, $|S_{21e}|^2=12dB$ ($f=1GHz$).

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	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=1V, I_C=0$	-	-	1	μA
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

