

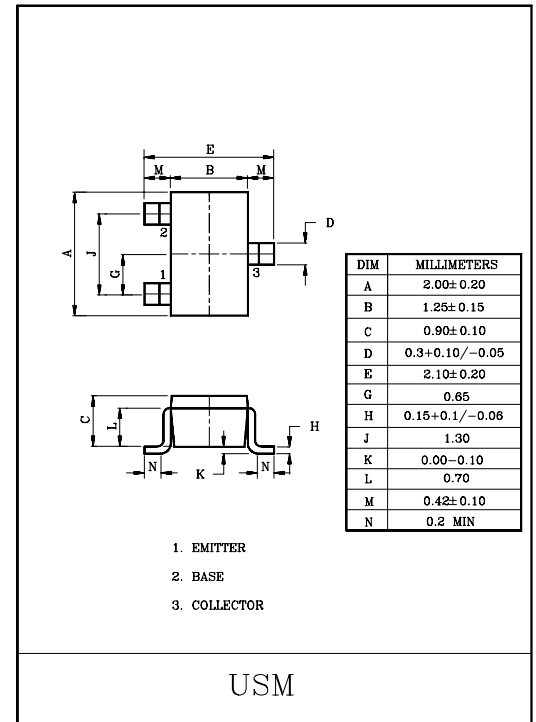
LOW NOISE AMPLIFIER APPLICATION.

FEATURE

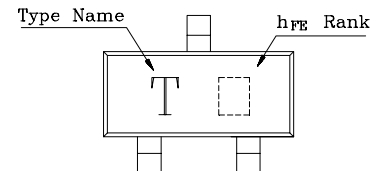
- High h_{FE} : $h_{FE}=600\sim 3600$.
- Noise Figure : 0.5dB(Typ.) at $f=100\text{Hz}$.

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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	60	V
Collector-Emitter Voltage	V_{CEO}	50	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	150	mA
Base Current	I_B	30	mA
Collector Power Dissipation	P_C	100	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	$-55\sim 150$	$^\circ\text{C}$

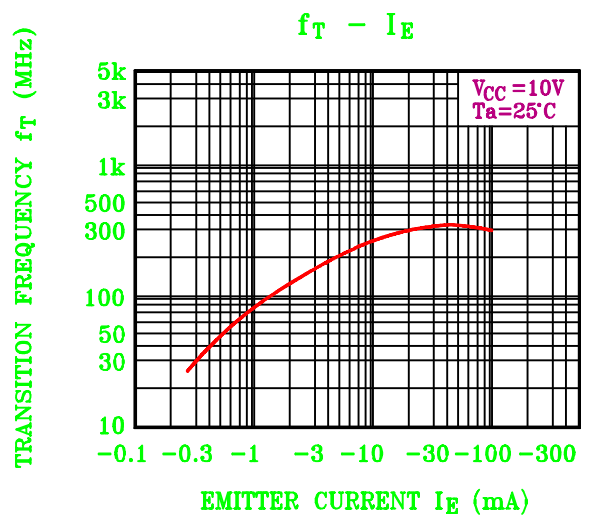
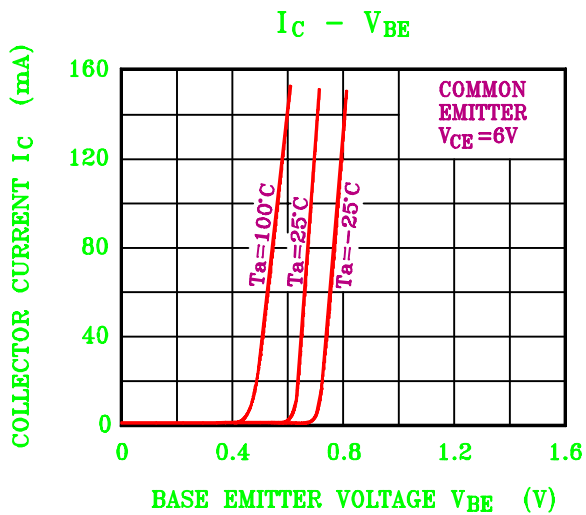
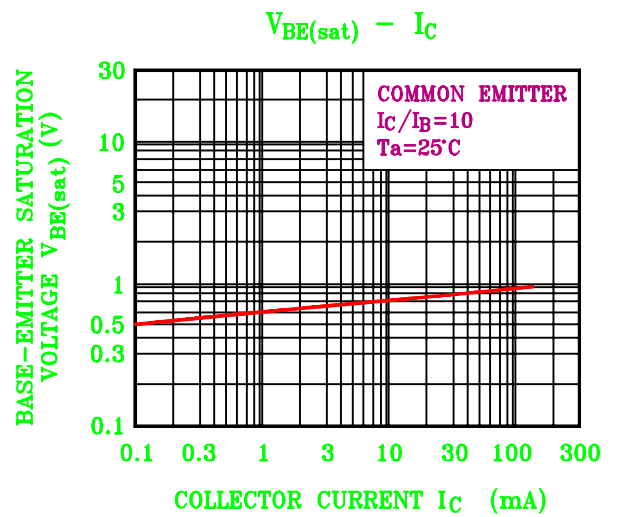
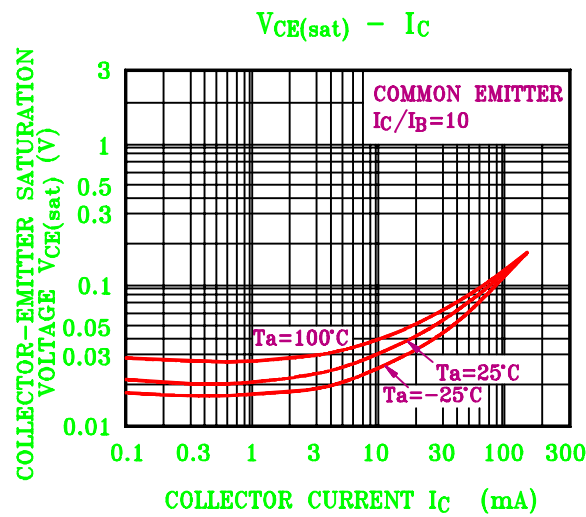
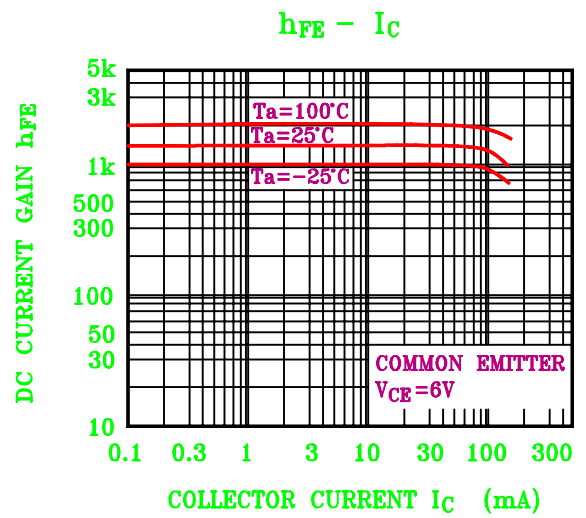
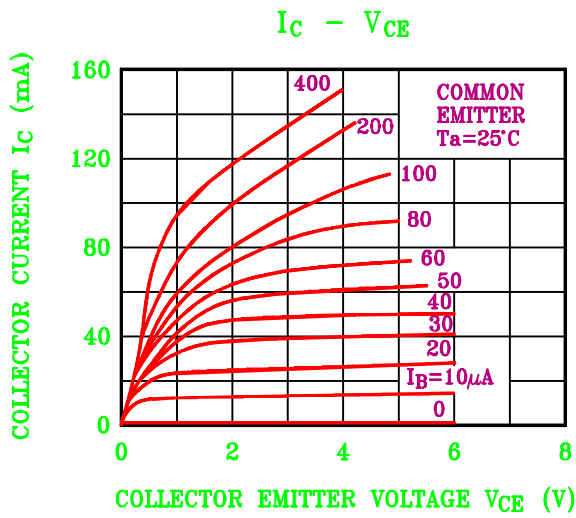


Marking

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

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CE}=50\text{V}, I_E=0$	-	-	0.1	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=5\text{V}, I_C=0$	-	-	0.1	μA
DC Current Gain	h_{FE} (Note)	$V_{CE}=6\text{V}, I_C=2\text{mA}$	600	-	3600	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=100\text{mA}, I_B=10\text{mA}$	-	0.12	0.25	V
Transition Frequency	f_T	$V_{CE}=10\text{V}, I_C=10\text{mA}$	100	250	-	MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=10\text{V}, I_E=0, f=1\text{MHz}$	-	3.5	-	pF
Noise Figure	NF (1)	$V_{CE}=6\text{V}, I_C=0.1\text{mA}, f=100\text{Hz}, R_g=10\text{k}\Omega$	-	0.5	-	dB
	NF (2)	$V_{CE}=6\text{V}, I_C=0.1\text{mA}, f=1\text{kHz}, R_g=10\text{k}\Omega$	-	0.3	-	

Note : h_{FE} Classification A:600~1800 , B:1200~3600



KTC4666

