

GENERAL PURPOSE APPLICATION.
SWITCHING APPLICATION.

FEATURES

- Excellent h_{FE} Linearity
 - : $h_{FE(2)}=100(\text{Typ.})$ at $V_{CE}=6V, I_C=150\text{mA}$
 - : $h_{FE(I_C=0.1\text{mA})}/h_{FE(I_C=2\text{mA})}=0.95(\text{Typ.})$.
- Low Noise : $NF=1\text{dB}(\text{Typ.})$ at $f=1\text{kHz}$.
- Complementary to KTA1266.

MAXIMUM RATING (Ta=25)

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	50	mA
Collector Power Dissipation	$*P_C$	625	mW
		400	
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

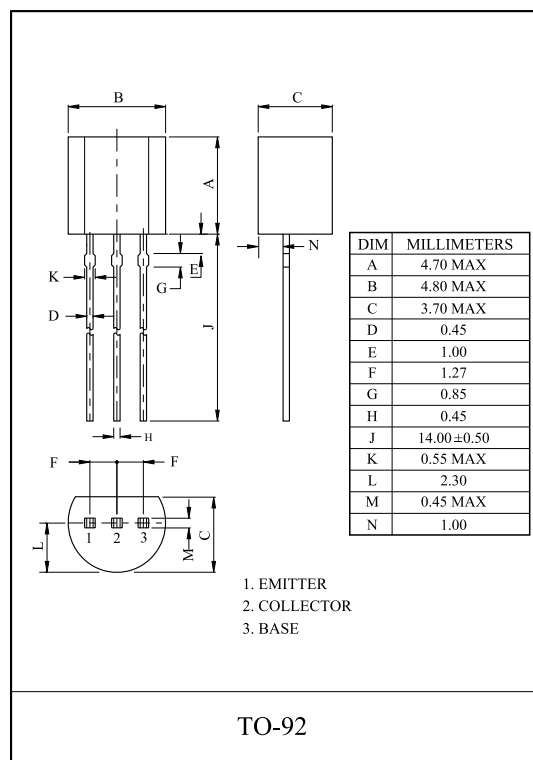
*Cu Lead-Frame : 625mW

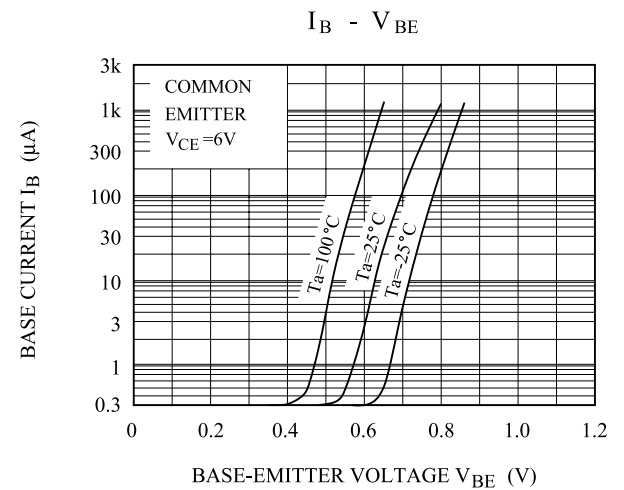
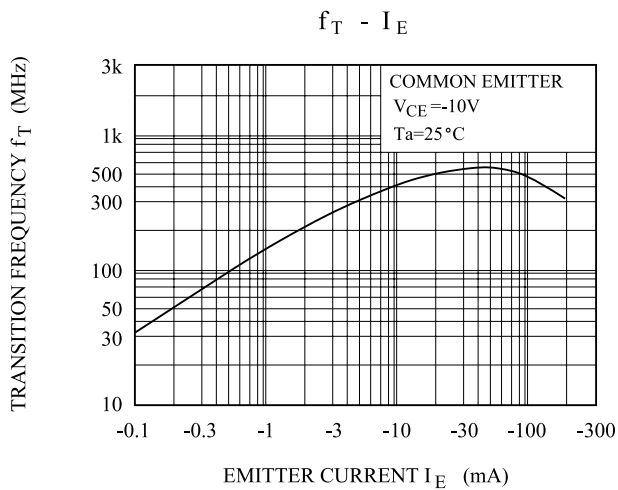
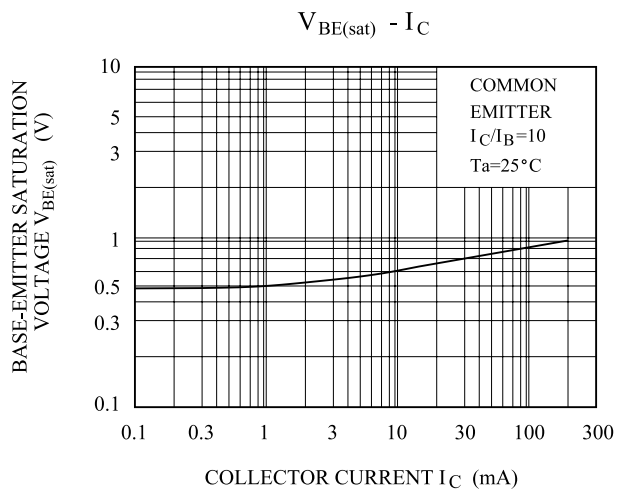
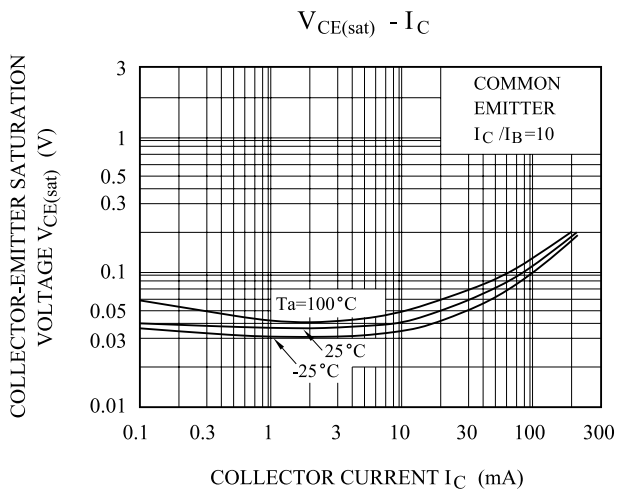
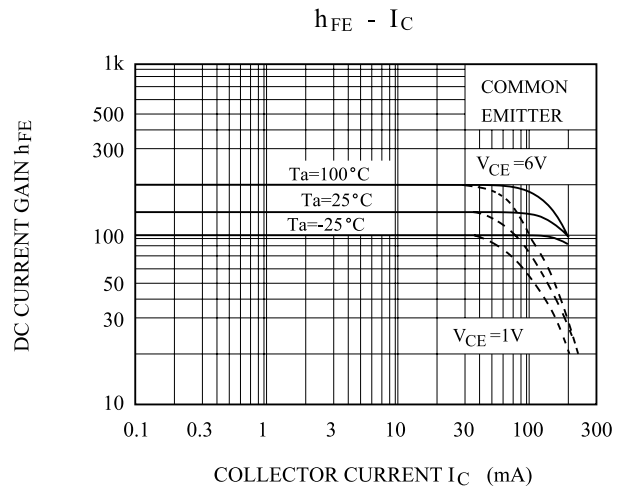
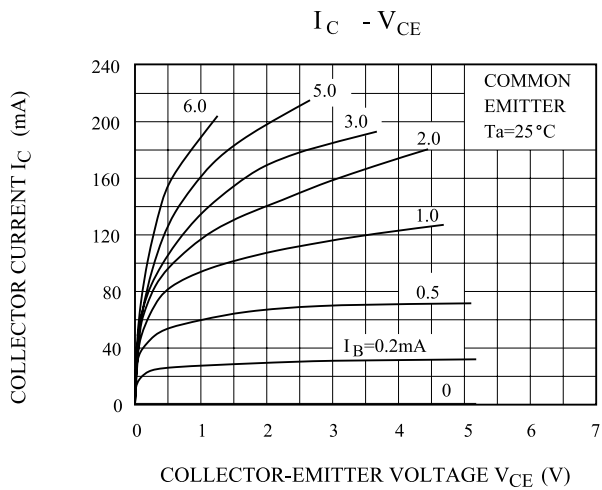
Fe Lead-Frame : 400mW

ELECTRICAL CHARACTERISTICS (Ta=25)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB}=60V, I_E=0$	-	-	0.1	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=5V, I_C=0$	-	-	0.1	μA
DC Current Gain	$h_{FE(1)}$ (Note)	$V_{CE}=6V, I_C=2\text{mA}$	70	-	700	
	$h_{FE(2)}$	$V_{CE}=6V, I_C=150\text{mA}$	25	100	-	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=100\text{mA}, I_B=10\text{mA}$	-	0.1	0.25	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=100\text{mA}, I_B=10\text{mA}$	-	-	1.0	V
Transition Frequency	f_T	$V_{CE}=10V, I_C=1\text{mA}$	80	-	-	MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=10V, I_E=0, f=1\text{MHz}$	-	2.0	3.5	pF
Base Intrinsic Resistance	$r_{bb'}$	$V_{CB}=10V, I_E=1\text{mA}, f=30\text{MHz}$	-	50	-	
Noise Figure	NF	$V_{CE}=6V, I_C=0.1\text{mA}, R_g=10k, f=1\text{kHz}$	-	1.0	10	dB

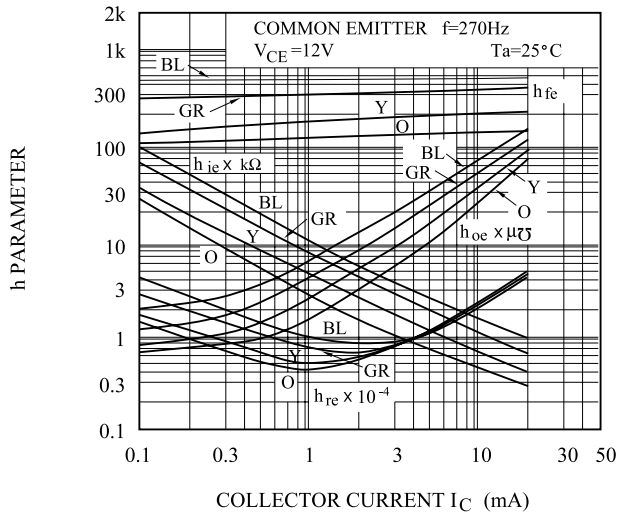
Note : $h_{FE(1)}$ Classification O:70 140, Y:120 240, GR:200 400, BL:300~700



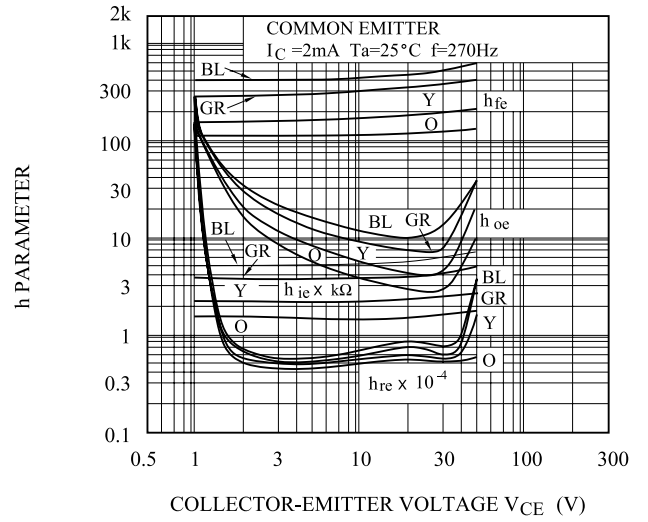


KTC3198

h PARAMETER - I_C



h PARAMETER - V_{CE}



$P_c - T_a$

