

GENERAL PURPOSE APPLICATION.
SWITCHING APPLICATION.

FEATURES

- Excellent h_{FE} Linearity.
- Complementary to KTC9012.

MAXIMUM RATING (Ta=25)

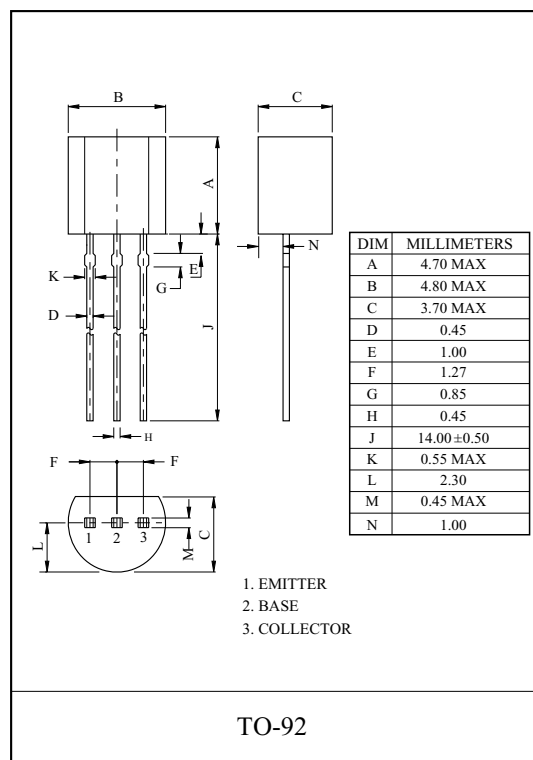
CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	40	V
Collector-Emitter Voltage	V_{CEO}	30	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	500	mA
Emitter Current	I_E	-500	mA
Collector Power Dissipation	$*P_C$	625	mW
		400	
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

*Cu Lead-Frame : 625mW
Fe Lead-Frame : 400mW

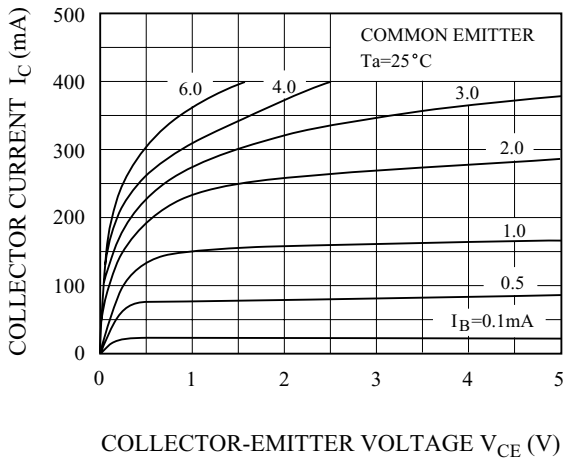
ELECTRICAL CHARACTERISTICS (Ta=25)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB}=35V, I_E=0$	-	-	0.1	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=5V, I_C=0$	-	-	0.1	μA
DC Current Gain	h_{FE} (Note)	$V_{CE}=1V, I_C=50mA$	64	-	246	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=100mA, I_B=10mA$	-	0.1	0.25	V
Base-Emitter Voltage	V_{BE}	$I_C=100mA, V_{CE}=1V$	-	0.8	1.0	V
Transition Frequency	f_T	$V_{CB}=6V, I_C=20mA, f=100MHz$	140	-	-	MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=6V, I_E=0, f=1MHz$	-	7.0	-	pF

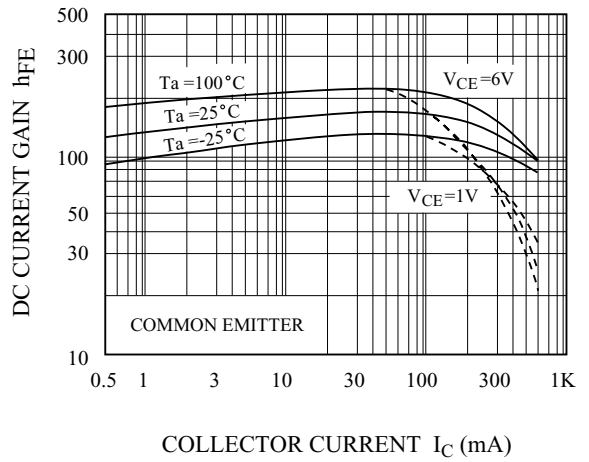
Note : h_{FE} Classification D:64 91, E:78 112, F:96 135, G:118 166, H:144 202, I:176 246



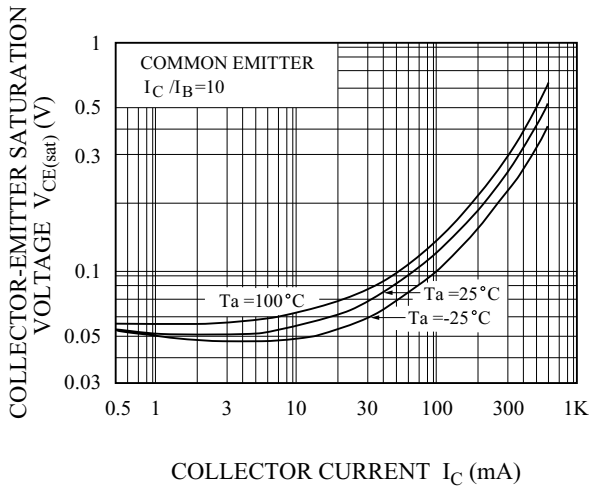
$I_C - V_{CE}$
(LOW VOLTAGE REGION)



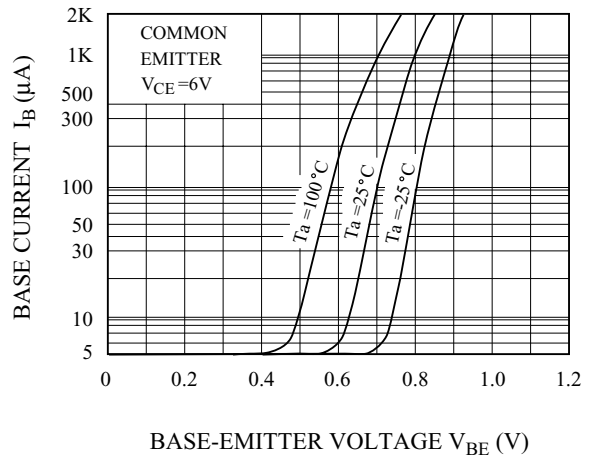
$h_{FE} - I_C$



$V_{CE(sat)} - I_C$



$I_B - V_{BE}$



$P_C - T_a$

