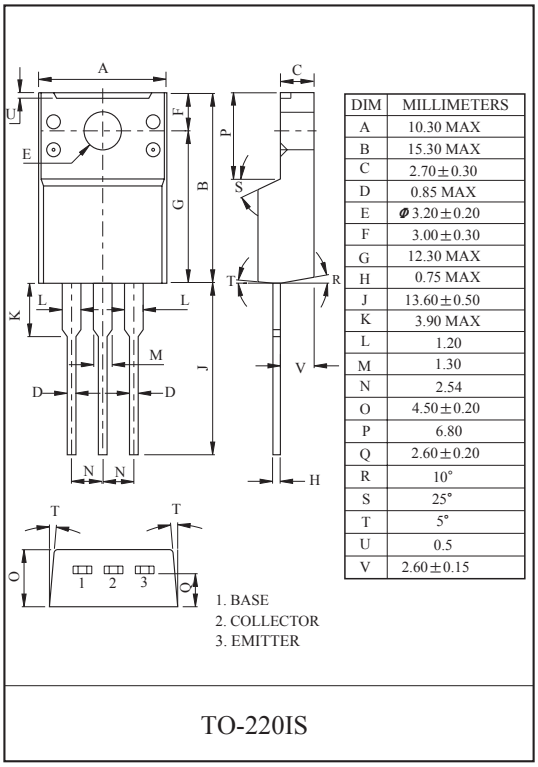
KTC4511

EPITAXIAL PLANAR NPN TRANSISTOR

HIGH POWER AMPLIFIER APPLICATION.

FEATURES

・Complementary to KTA1725.



DIM	MILLIMETERS
A	10.30 MAX
B	15.30 MAX
C	2.70±0.30
D	0.85 MAX
E	Ø3.20±0.20
F	3.00±0.30
G	12.30 MAX
H	0.75 MAX
J	13.60±0.50
K	3.90 MAX
L	1.20
M	1.30
N	2.54
O	4.50±0.20
P	6.80
Q	2.60±0.20
R	10°
S	25°
T	5°
U	0.5
V	2.60±0.15

TO-220IS

MAXIMUM RATING (Ta=25℃)

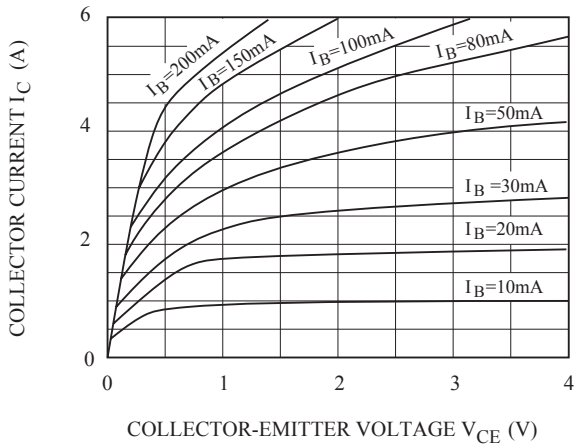
CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	80	V
Collector-Emitter Voltage	V_{CEO}	80	V
Emitter-Base Voltage	V_{EBO}	6	V
Collector Current	I_C	6	A
Base Current	I_B	3	A
Collector Power Dissipation (Tc=25℃)	P_C	30	W
Junction Temperature	T_j	150	℃
Storage Temperature Range	T_{stg}	-55～150	℃

ELECTRICAL CHARACTERISTICS (Ta=25℃)

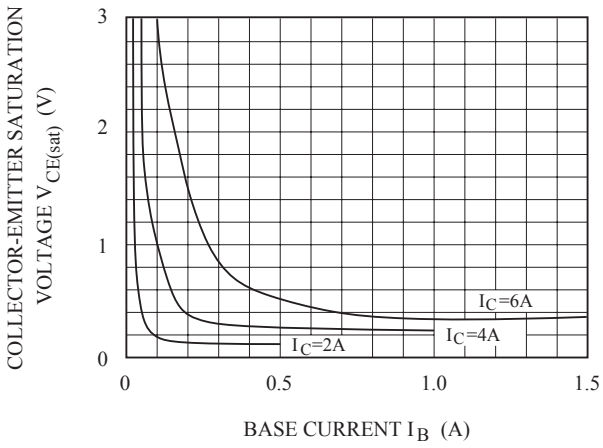
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	V_{CB}=80V, I_E=0	-	-	10	μA
Emitter Cut-off Current	I_{EBO}	V_{EB}=6V, I_C=0	-	-	10	μA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C=25mA, I_B=0	80	-	-	V
DC Current Gain	h_{FE} (Note)	V_{CE}=4V, I_C=2A	55	-	160	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=2A, I_B=0.2A	-	-	0.5	V
Transition Frequency	f_T	V_{CE}=12V, I_C=0.5A	-	20	-	MHz
Collector Output Capacitance	C_{ob}	V_{CB}=10V, I_E=0, f=1MHz	-	150	-	pF

Note : h_{FE} Classification R:55~110, O:80~160.

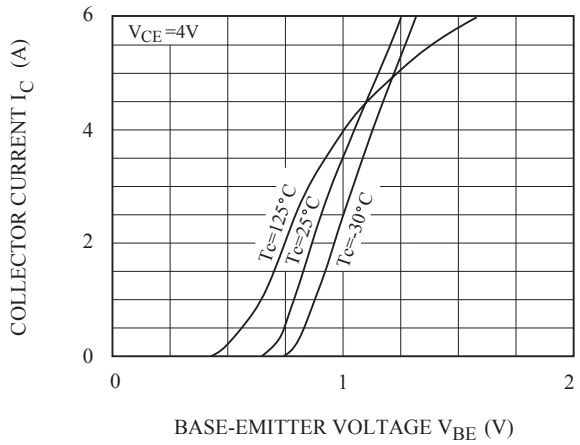
I_C - V_{CE}



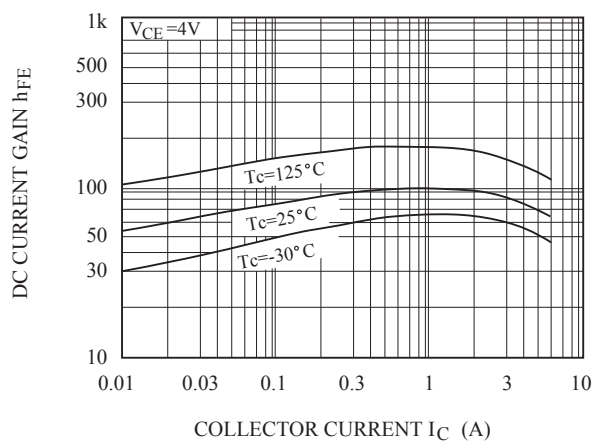
$V_{CE(sat)}$ - I_B



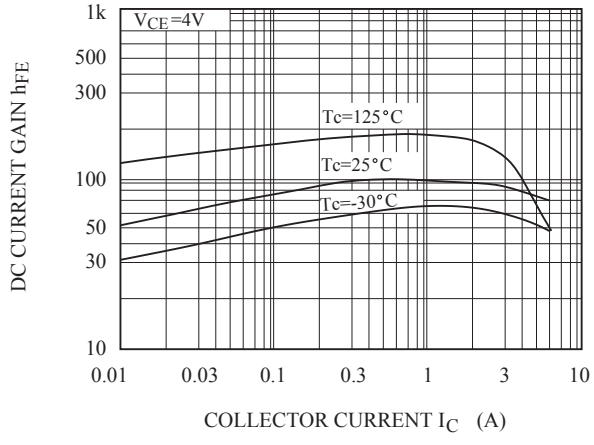
I_C - V_{BE}



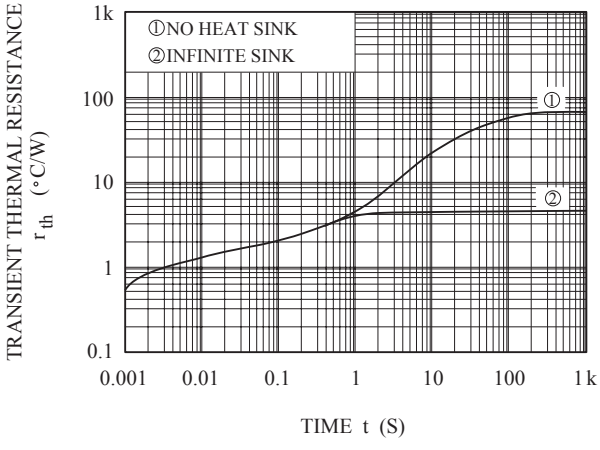
h_{FE} - I_C



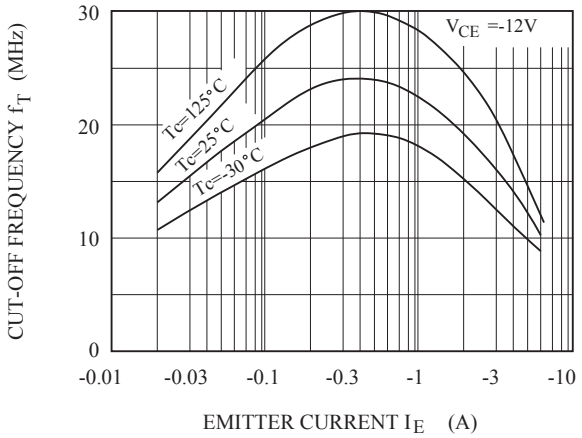
h_{FE} - I_C



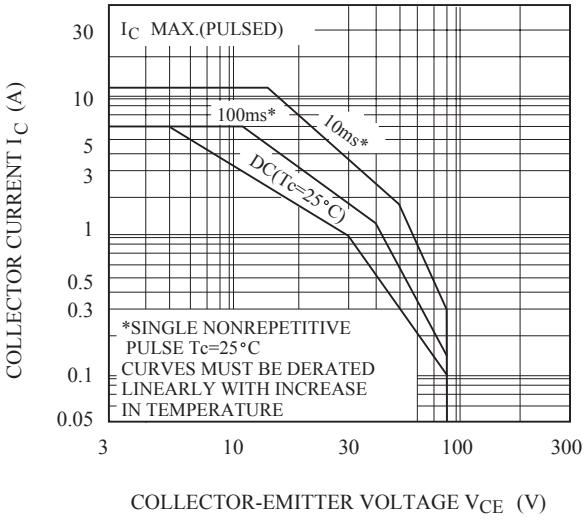
R_{th} - t



f_T - I_E



SAFE OPERATING AREA



Pc - Ta