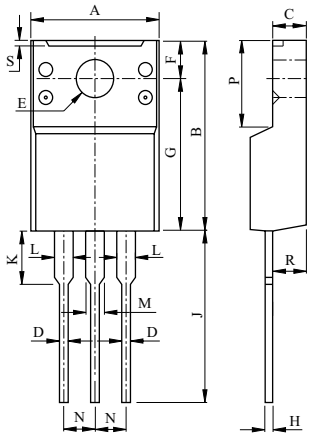
KTB1423

EPITAXIAL PLANAR PNP TRANSISTOR

SWITCHING APPLICATIONS.
HAMMER DRIVER, PULSE MOTOR DRIVER APPLICATIONS.

FEATURES

- High DC Current Gain : h_{FE}=1000(Min.) at V_{CE}=-3V, I_C=-3A.
- High Collector Breakdown Voltage : V_{CEO}=-120V (Min.)
- Complementary to KTD1413.



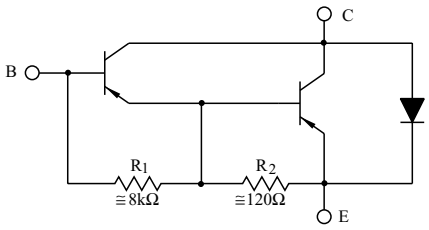
DIM	MILLIMETERS
A	10.0±0.3
B	15.0±0.3
C	2.70±0.3
D	0.76+0.09/-0.05
E	Φ3.2±0.2
F	3.0±0.3
G	12.0±0.3
H	0.5+0.1/-0.05
J	13.6±0.5
K	3.7±0.2
L	1.2+0.25/-0.1
M	1.5+0.25/-0.1
N	2.54±0.1
P	6.8±0.1
Q	4.5±0.2
R	2.6±0.2
S	0.5 Typ

TO-220IS

MAXIMUM RATING (Ta=25℃)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		V_{CBO}	-120	V
Collector-Emitter Voltage		V_{CEO}	-120	V
Emitter-Base Voltage		V_{EB0}	-5	V
Collector Current	DC	I_C	-5	A
	Pules	I_{CP}	-8	
Base Current		I_B	-0.12	A
Collector Power Dissipation (Tc=25℃)		P_C	30	W
Junction Temperature		T_j	150	℃
Storage Temperature Range		T_{stg}	-55 ~150	℃

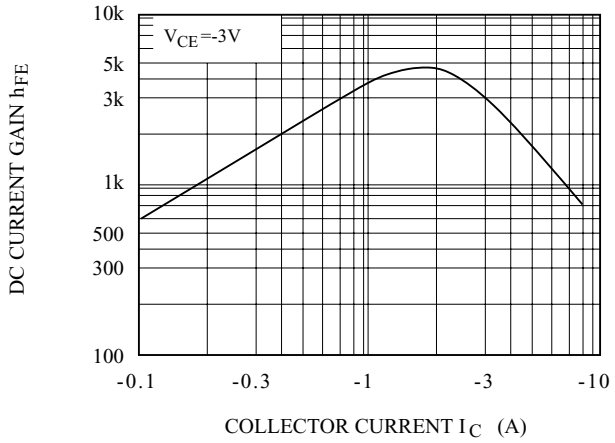
EQUIVALENT CIRCUIT



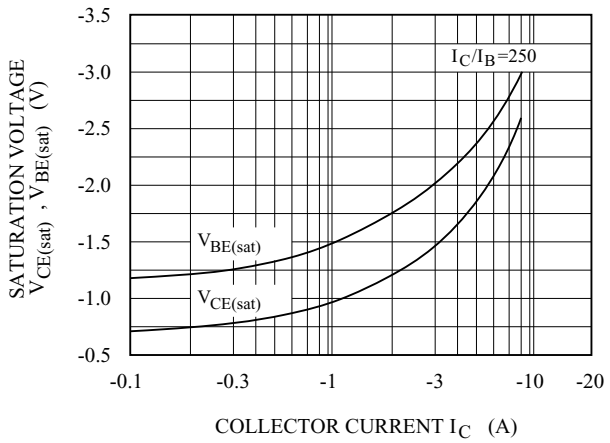
ELECTRICAL CHARACTERISTICS (Ta=25℃)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	V_{CB}=-100V, I_E=0	-	-	-1	mA
Emitter Cut-off Current	I_{EBO}	V_{BE}=-5V, I_C=0	-	-	-2	mA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C=-10mA, I_B=0	-120	-	-	V
DC Current Gain	h_{FE}(1)	V_{CE}=-3V, I_C=-0.5A	1000	-	-	
	h_{FE}(2)	V_{CE}=-3V, I_C=-3A	1000	-	-	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$ 1	I_C=-3A, I_B=-12mA	-	-	-2	V
	$V_{CE(sat)}$ 2	I_C=-5A, I_B=-20mA	-	-	-4	
Base-Emitter Voltage	V_{BE}	V_{CE}=-3V, I_C=-3A	-	-	-2.5	V
Output Capacitance	C_{ob}	V_{CB}=-10V, I_E=0, f=1MHz	-	-	300	pF

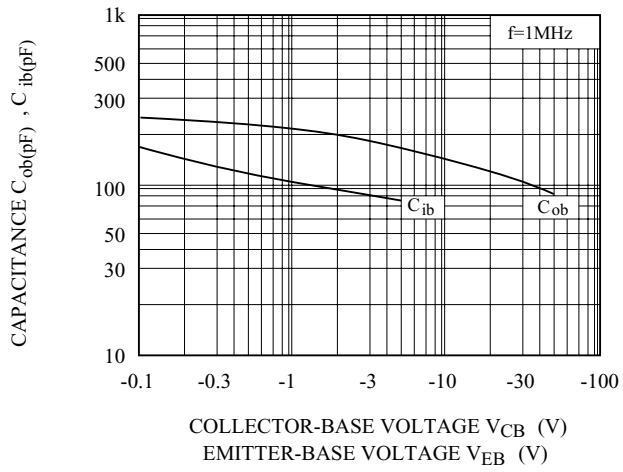
h_{FE} - I_C



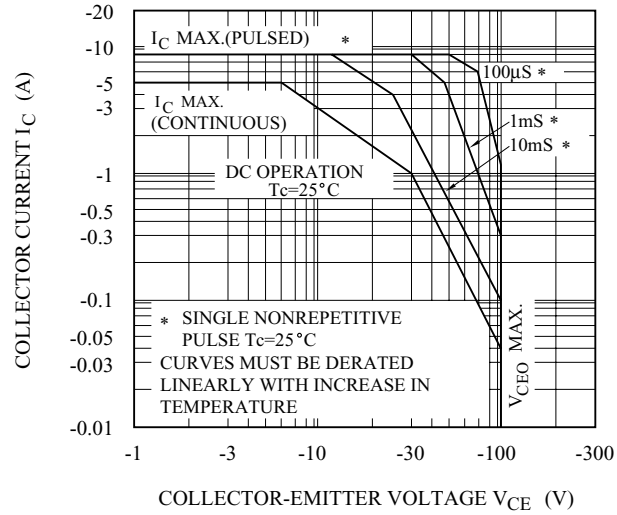
$V_{CE(sat)}$, $V_{BE(sat)}$, - I_C



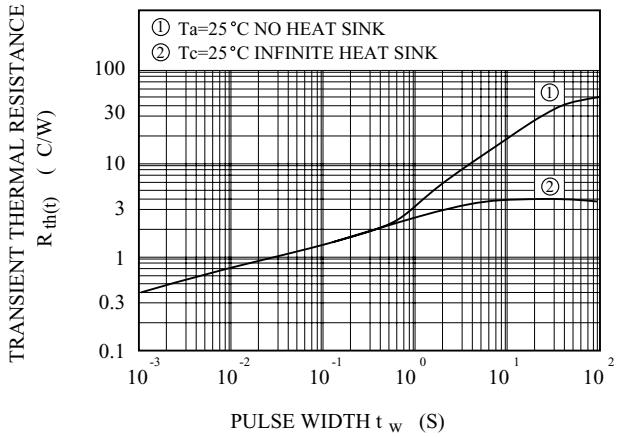
C_{ob} , C_{ib} - V_{CB} , V_{EB}



SAFE OPERATING AREA



$R_{th(t)}$ - t_w



Pc - Ta

