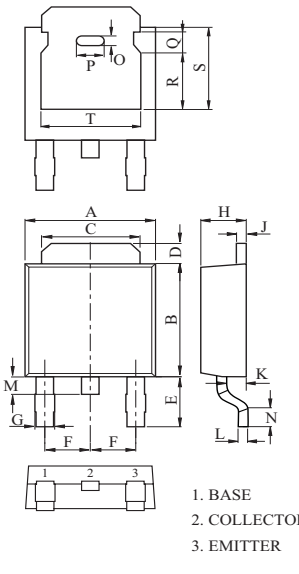
KTA1040D

EPITAXIAL PLANAR PNP TRANSISTOR

GENERAL PURPOSE APPLICATION.
DPAK FOR SURFACE MOUNT APPLICATIONS.

FEATURES

- Low Collector Saturation Voltage
  : $V_{CE(sat)}$=-1.0V(Max.) at I_C=-2A, I_B=-0.2A.
- Complementary to KTC2020D.
- Suffix **U** : Qualified to AEC-Q 101
  ex) KTA1040D-Y-RTF/H**U**



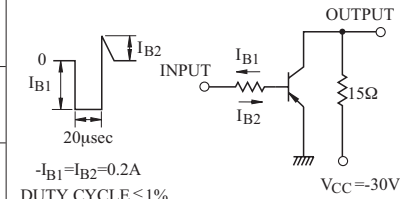
DIM	MILLIMETERS
A	6.6±0.2
B	6.1±0.2
C	5.0±0.2
D	1.1±0.2
E	2.7±0.2
F	2.3±0.1
G	1.0 MAX
H	2.3±0.2
J	0.5±0.1
K	1.0±0.1
L	0.5±0.1
M	0.95 MAX
N	0.9±0.1
O	0.53±0.05
P	1.40±0.1
Q	1.15±0.3
R	3.01±0.3
S	4.43±0.3
T	5.05±0.2

DPAK

MAXIMUM RATING (Ta=25℃)

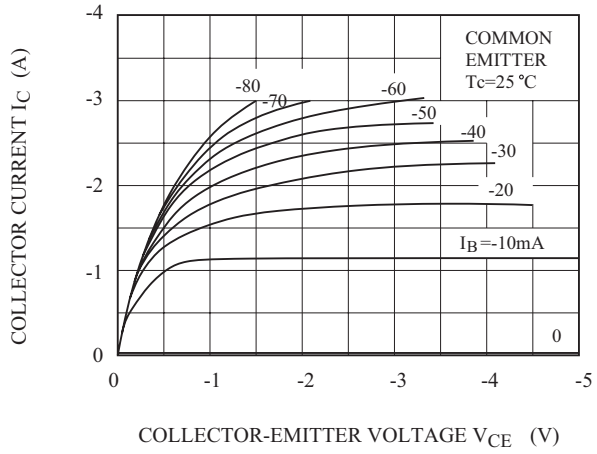
CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		V_{CBO}	-60	V
Collector-Emitter Voltage		V_{CEO}	-60	V
Emitter-Base Voltage		V_{EBO}	-7	V
Collector Current		I_C	-3	A
Base Current		I_B	-0.5	A
Collector Power Dissipation	Ta=25℃	P_C	1.0	W
	Tc=25℃		20	
Junction Temperature		T_j	150	℃
Storage Temperature Range		T_{stg}	-55 150	℃

ELECTRICAL CHARACTERISTICS (Ta=25℃)

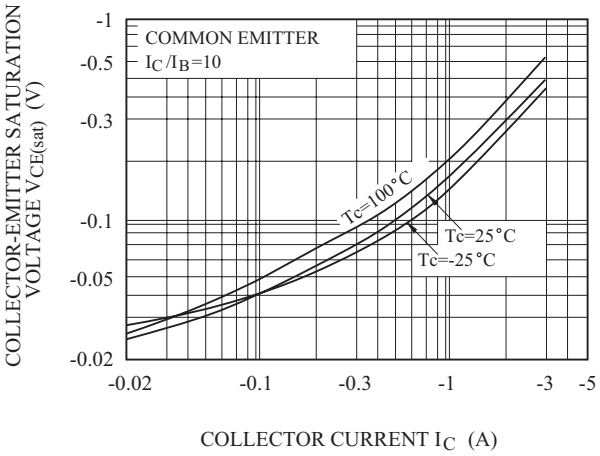
CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current		I_{CBO}	V_{CB}=-60V, I_E=0	-	-	-1	μA
Emitter Cut-off Current		I_{EBO}	V_{EB}=-7V, I_C=0	-	-	-1	μA
Collector-Emitter Breakdown Voltage		$V_{(BR)CEO}$	I_C=-50mA, I_B=0	-60	-	-	V
DC Current Gain		h_{FE}(1)(Note)	V_{CE}=-5V, I_C=-0.5A	100	-	300	
		h_{FE}(2)	V_{CE}=-5V, I_C=-3A	20	-	-	
Collector Emitter Saturation Voltage		$V_{CE(sat)}$	I_C=-2A, I_B=-0.2A	-	-0.25	-1.0	V
Base-Emitter Voltage		V_{BE}	V_{CE}=-5V, I_C=-0.5A	-	-0.7	-1.0	V
Transition Frequency		f_T	V_{CE}=-5V, I_C=-0.5A	-	30	-	MHz
Collector Output Capacitance		C_{ob}	V_{CB}=-10V, I_E=0, f=1MHz	-	45	-	pF
Switching Time	Turn-on Time	t_{on}		-	0.4	-	μS
	Storage Time	t_{stg}		-	1.7	-	
	Fall Time	t_f		-	0.5	-	

Note : h_{FE}(1) Classification Y:100~200, GR:150~300.

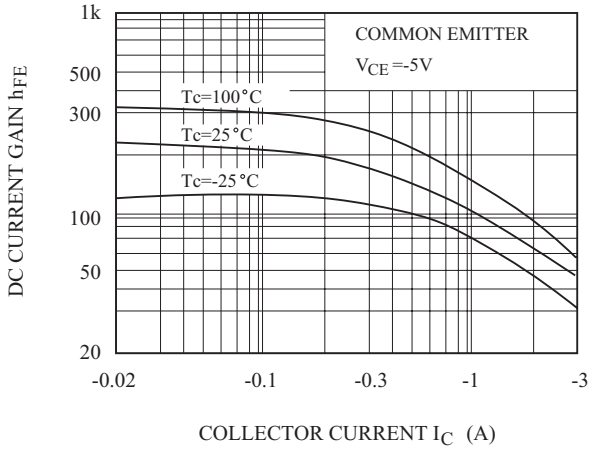
I_C - V_{CE}



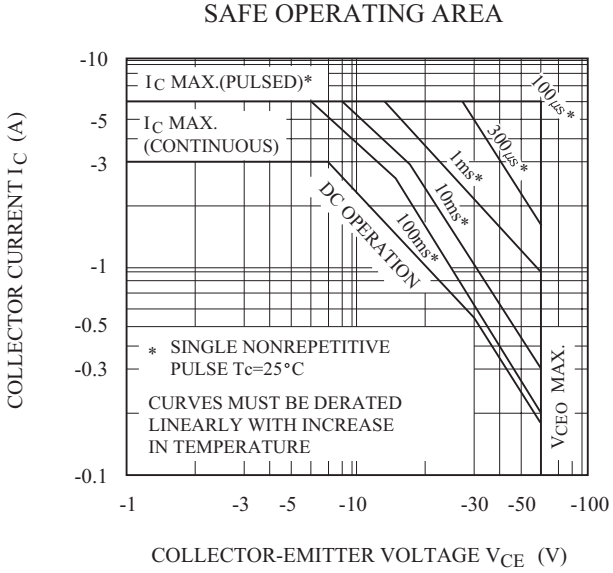
$V_{CE(sat)}$ - I_C



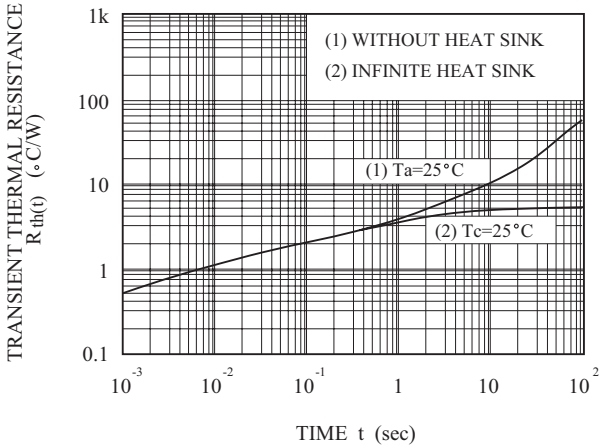
h_{FE} - I_C



SAFE OPERATING AREA



$R_{th(t)}$ - t



Pc - Ta