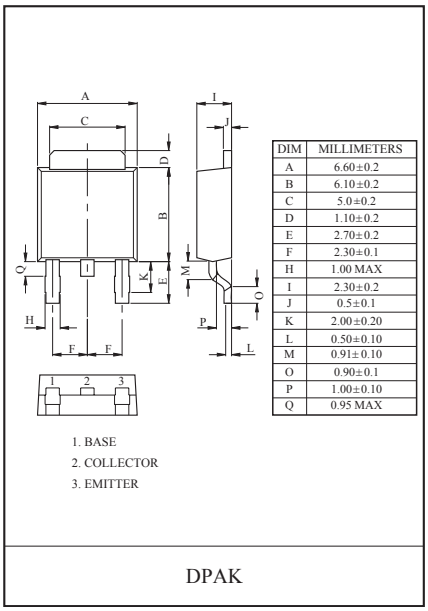
KTA1385D

EPITAXIAL PLANAR PNP TRANSISTOR

LOW COLLECTOR SATURATION VOLTAGE
LARGE CURRENT

FEATURES

· Complementary to KTC5103D
· Suffix **U** : Qualified to AEC-Q 101
ex) KTA1385D-O-RTF/H**U**



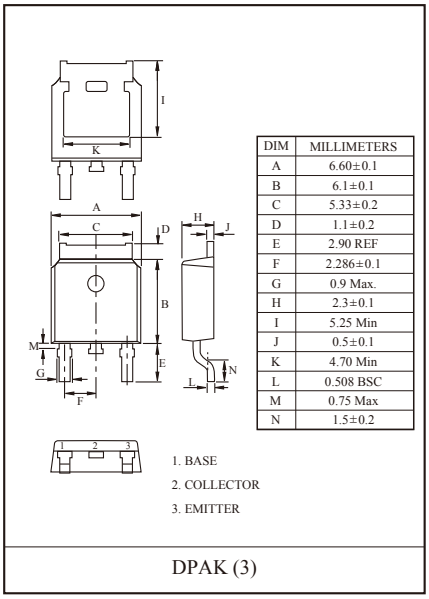
DIM	MILLIMETERS
A	6.60±0.2
B	6.10±0.2
C	5.0±0.2
D	1.10±0.2
E	2.70±0.2
F	2.30±0.1
H	1.00 MAX
I	2.30±0.2
J	0.5±0.1
K	2.00±0.20
L	0.50±0.10
M	0.91±0.10
O	0.90±0.1
P	1.00±0.10
Q	0.95 MAX

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	DC	I_C	-5	A
	Pulse *	I_{CP}	-8	
Base Current		I_B	-1	A
Collector Power Dissipation	Ta=25℃	P_C	1.0	W
	Tc=25℃		15	
Junction Temperature		T_j	150	℃
Storage Temperature Range		T_{stg}	-55 ~ 150	℃

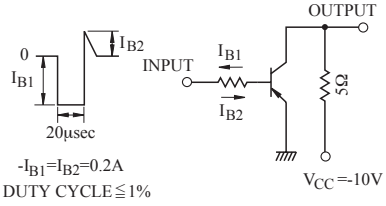
* PW≤ 10ms, Duty Cycle ≤ 50%



DIM	MILLIMETERS
A	6.60±0.1
B	6.1±0.1
C	5.33±0.2
D	1.1±0.2
E	2.90 REF
F	2.286±0.1
G	0.9 Max.
H	2.3±0.1
I	5.25 Min
J	0.5±0.1
K	4.70 Min
L	0.508 BSC
M	0.75 Max
N	1.5±0.2

DPAK (3)

ELECTRICAL CHARA CTERISTICS (Ta=25℃)

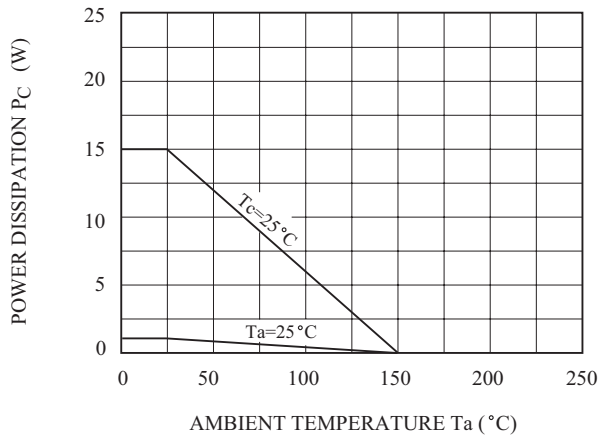
CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current		I_{CBO}	V_{CB}=-50V, I_E=0	-	-	-10	μA
Emitter Cut-off Current		I_{EBO}	V_{EB}=-7V, I_C=0	-	-	-10	μA
DC Current Gain *		h_{FE} 1	V_{CE}=-1V, I_C=-0.1A	60	-	-	
		h_{FE}2 (Note)	V_{CE}=-1V, I_C=-2A	160	-	400	
		h_{FE} 3	V_{CE}=-2V, I_C=-5A	50	-	-	
Collector-Emitter Saturation Voltage *		$V_{CE(sat)}$	I_C=-2A, I_B=-0.2A	-	-0.14	-0.3	V
Base-Emitter Saturation Voltage *		$V_{BE(sat)}$	I_C=-2A, I_B=-0.2A	-	-0.9	-1.2	V
Switching Time	Turn On Time	t_{on}		-	0.15	1	μS
	Storage Time	t_{stg}		-	0.78	2.5	
	Fall Time	t_f		-	0.18	1	

$-I_{B1}=I_{B2}=0.2A$
DUTY CYCLE≦1%

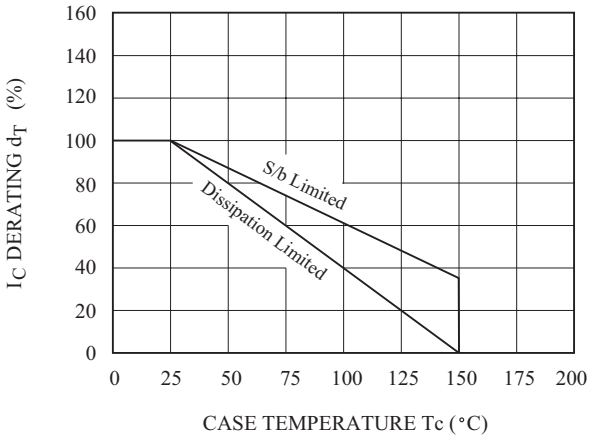
* Pulse test : PW ≤ 350 μS, Duty Cycle ≤ 2% Pulse

Note) h_{FE}(2) Classification : O:160 ~ 320, Y:200 ~ 400.

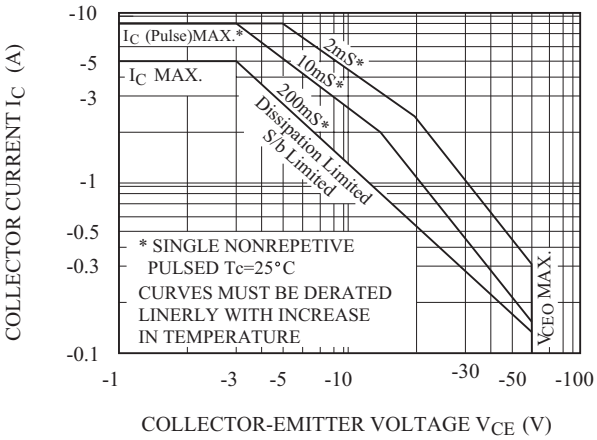
Pc - Ta



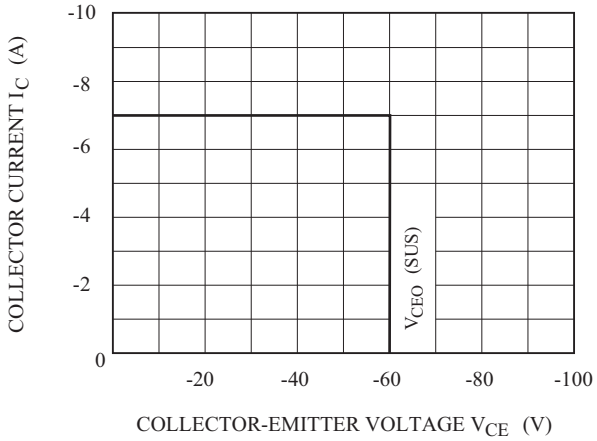
d_T - T_C



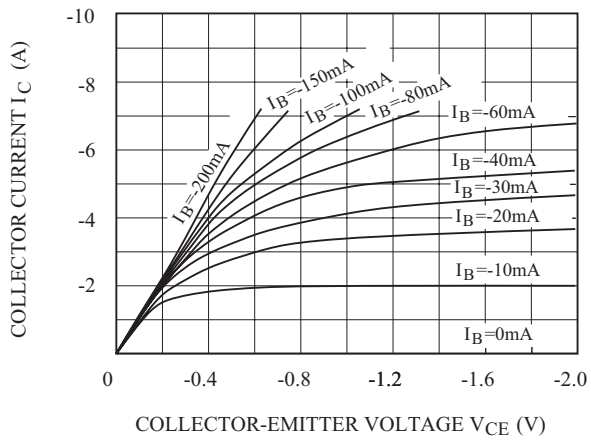
SAFE OPERATING AREA



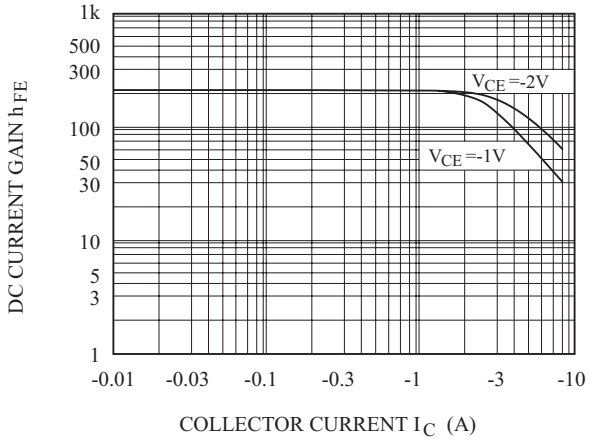
REVERSE BIAS
SAFE OPERATING AREA

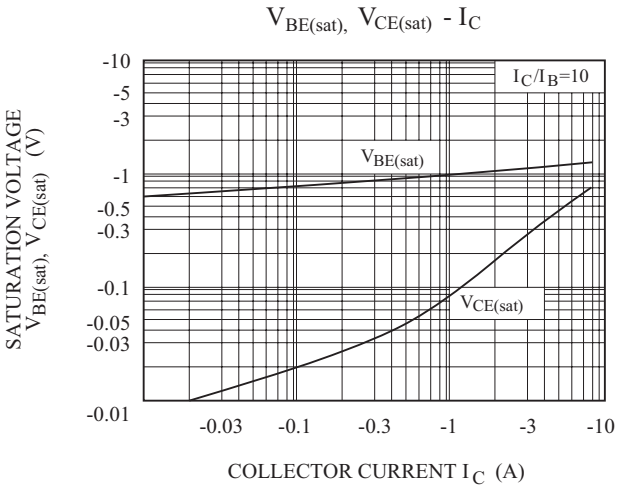


I_C - V_{CE}



h_{FE} - I_C




$V_{BE(sat)}$, $V_{CE(sat)}$ - I_C
I_C/I_B=10
$V_{BE(sat)}$
$V_{CE(sat)}$
SATURATION VOLTAGE $V_{BE(sat)}$, $V_{CE(sat)}$ (V)
-10
-5
-3
-1
-0.5
-0.3
-0.1
-0.05
-0.03
-0.01
-0.03
-0.1
-0.3
-1
-3
-10
COLLECTOR CURRENT I_C (A)