

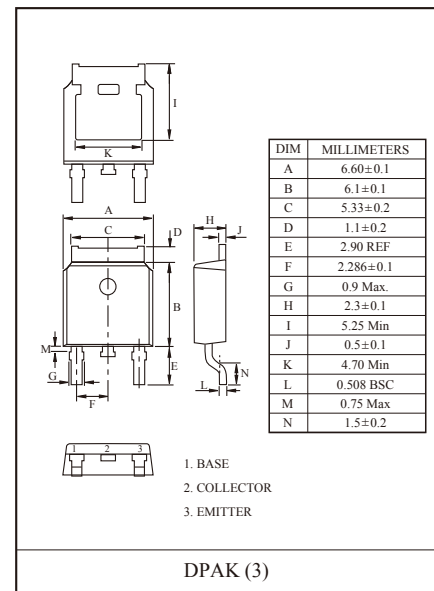
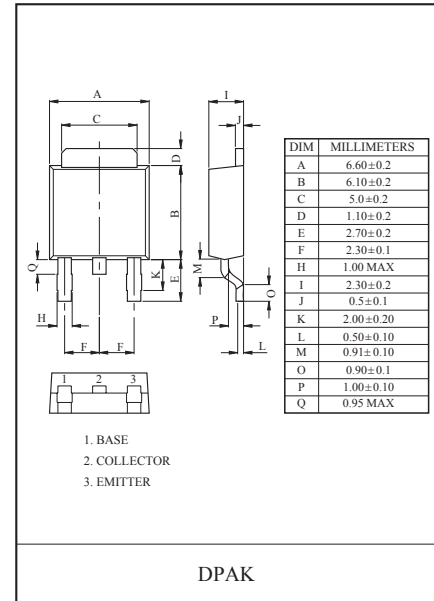
LOW COLLECTOR SATURATION VOLTAGE
LARGE CURRENT

FEATURES

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

MAXIMUM RATING (Ta=25°C)

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

* $PW \leq 10ms$, Duty Cycle $\leq 50\%$ 

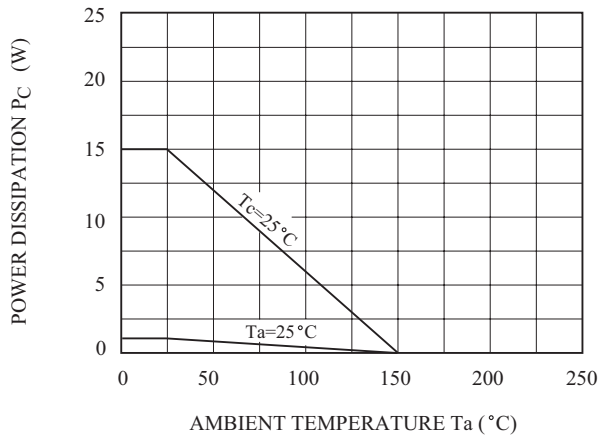
ELECTRICAL CHARACTERISTICS (Ta=25°C)

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_{FE1}	$V_{CE}=-1V, I_C=-0.1A$	60	-	-	
	h_{FE2} (Note)	$V_{CE}=-1V, I_C=-2A$	160	-	400	
	h_{FE3}	$V_{CE}=-2V, I_C=-5A$	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	

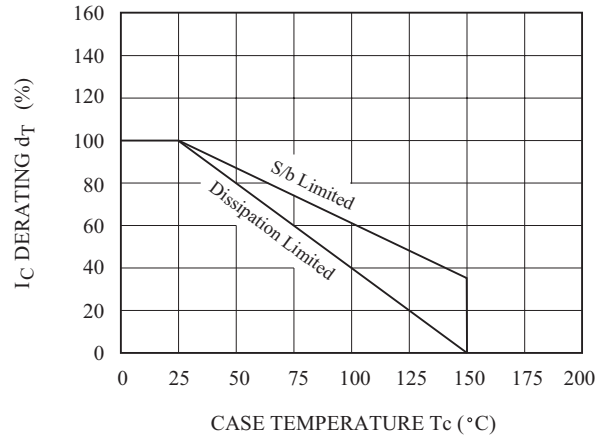
* Pulse test : $PW \leq 350 \mu S$, Duty Cycle $\leq 2\%$ PulseNote) $h_{FE(2)}$ Classification : O:160 ~ 320, Y:200 ~ 400.

KTA1385D

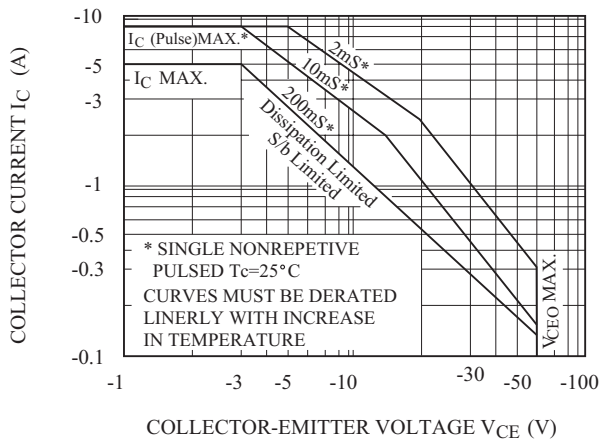
$P_c - T_a$



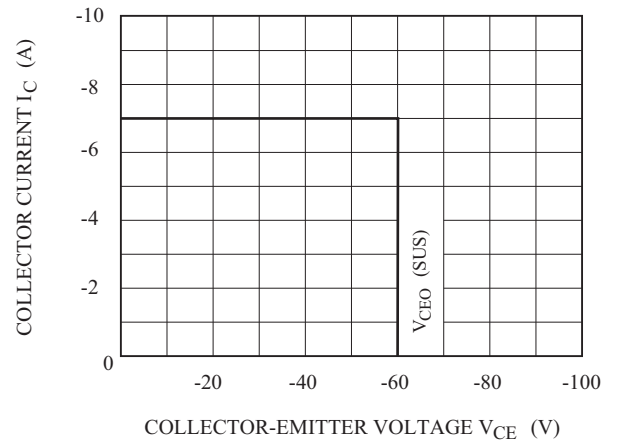
$d_T - T_c$



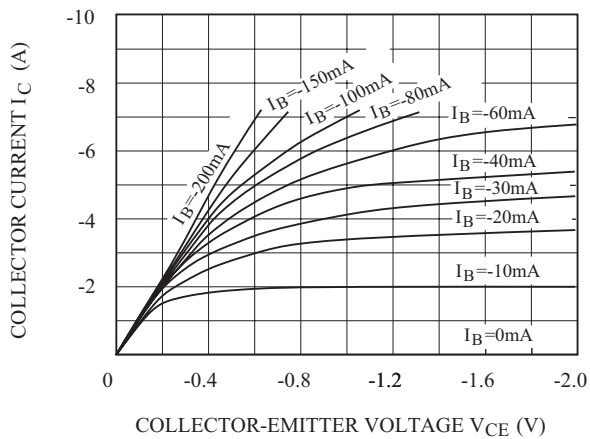
SAFE OPERATING AREA



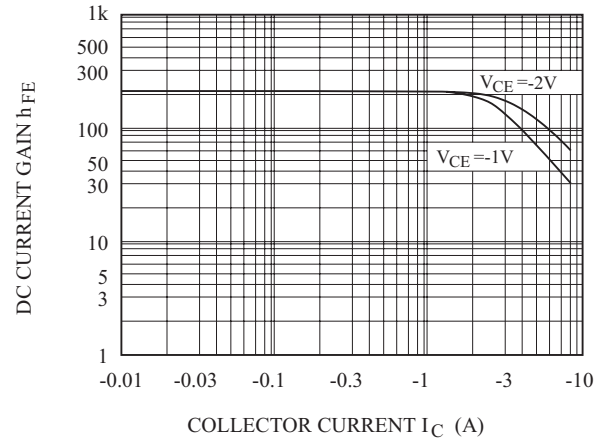
REVERSE BIAS SAFE OPERATING AREA



$I_C - V_{CE}$



$h_{FE} - I_C$



KTA1385D

