

HIGH CURRENT APPLICATION
CAMERA STROBO (For Electronic Flash Unit)

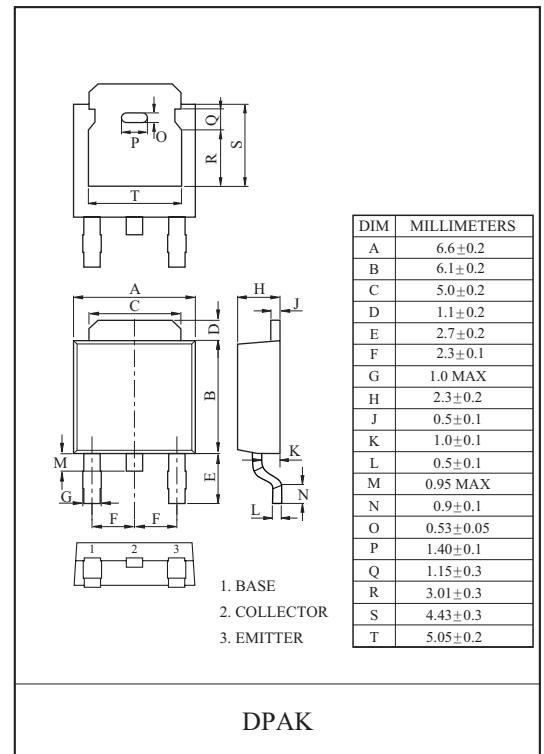
FEATURES

- Low Saturation Voltage : $V_{CE(sat)} = 0.4V(\text{Max})(I_C=3A)$
- High Performance at Low Supply Voltage.
- Suffix **U** : Qualified to AEC-Q 101
ex) KTC3072D-O-RTF/HU

MAXIMUM RATING (Ta=25°C)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		V_{CBO}	40	V
Collector-Emitter Voltage		V_{CEO}	20	V
Emitter-Base Voltage		V_{EBO}	7	V
Collector Current	DC	I_C	5	A
	Pulse (Note1)	I_{CP}	8	
Collector Power Dissipation		P_C	1.0	W
Junction Temperature		T_j	150	°C
Storage Temperature Range		T_{stg}	-55 150	°C

Note 1: Pulse Width $\leq 100\text{ms}$, Duty Cycle $\leq 30\%$

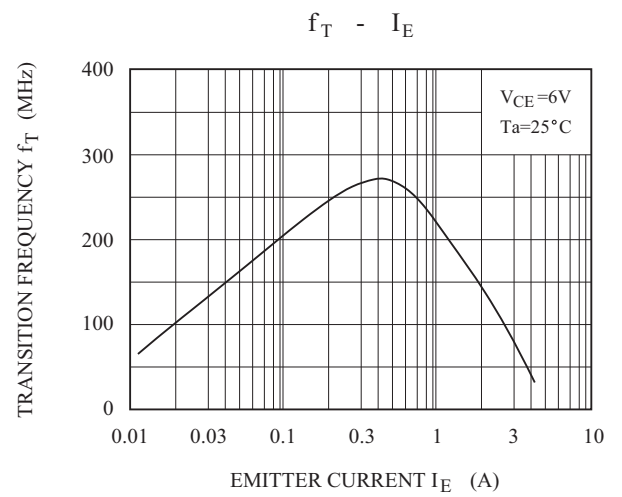
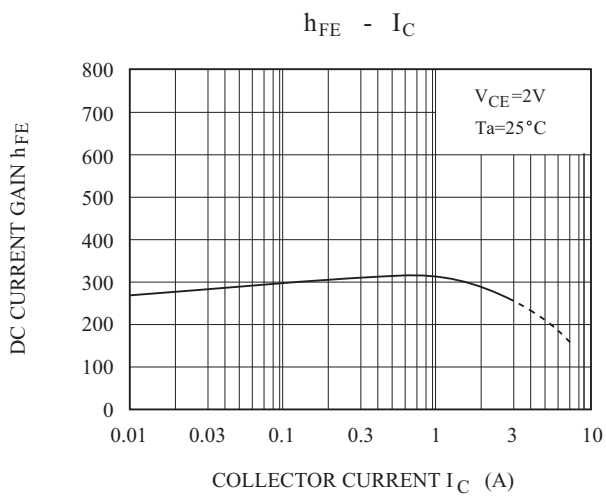
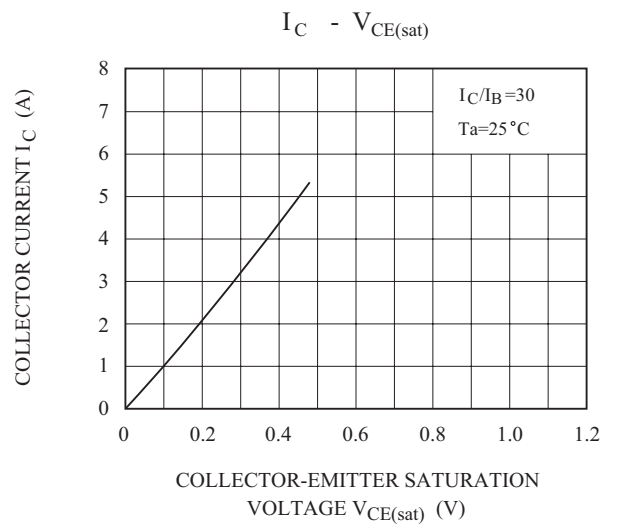
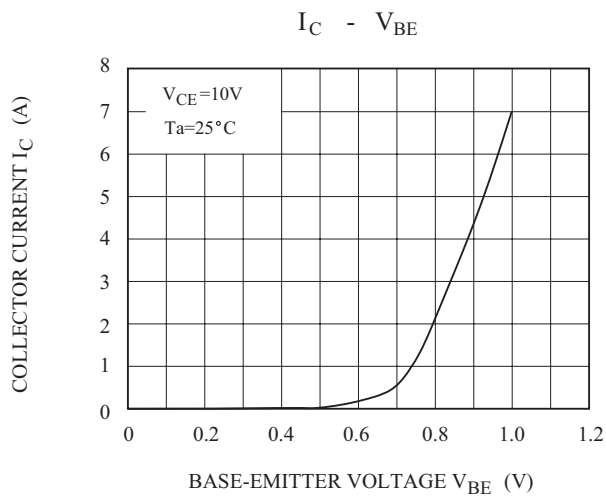
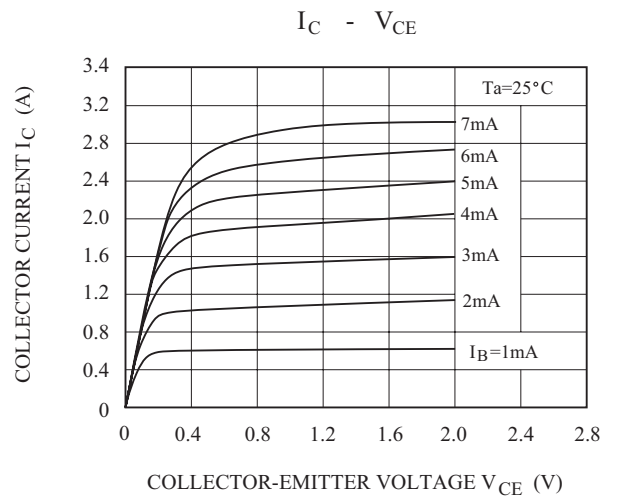
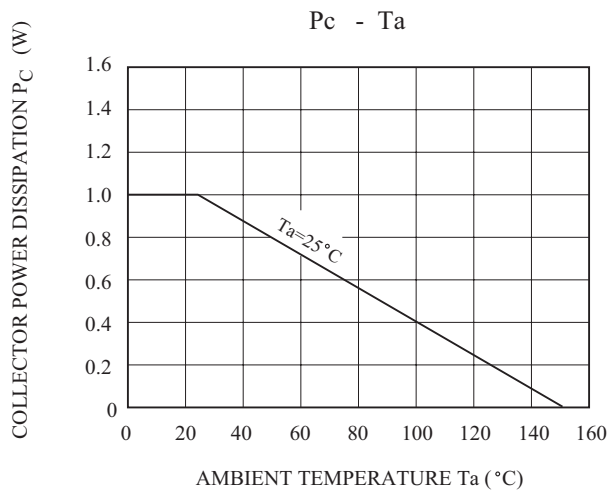


ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=100\ \mu A$, $I_E=0$	40	-	-	V
Collector Emitter Breakdown Voltage (1)	$V_{(BR)CEO}$	$I_C=1\text{mA}$, $I_B=0$	20	-	-	V
Emitter Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=10\ \mu A$, $I_C=0$	7	-	-	V
Collector Cutoff Current	I_{CBO}	$V_{CB}=20V$, $I_E=0$	-	-	100	nA
Emitter Cutoff Current	I_{EBO}	$V_{EB}=7V$, $I_C=0$	-	-	100	nA
DC Current Gain	$h_{FE(1)}(\text{Note1})$	$V_{CE}=2V$, $I_C=0.5A$	120	-	700	
	$h_{FE(2)}$	$V_{CE}=2V$, $I_C=2A$	100	-	-	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=3A$, $I_B=60\text{mA}(\text{Pulse})$	-	-	0.4	V
Transition Frequency	f_T	$V_{CE}=6V$, $I_C=50\text{mA}$	20	100	-	MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=20V$, $f=1\text{MHz}$, $I_E=0$	-	-	50	pF

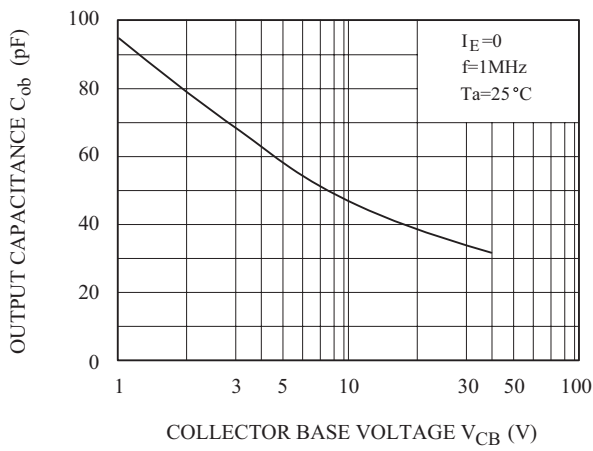
Note 1 : $h_{FE(1)}$ Classification O:120 240, Y:200 400, GR:350 700

KTC3072D



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$C_{ob} - V_{CB}$



SAFE OPERATION AREA

