

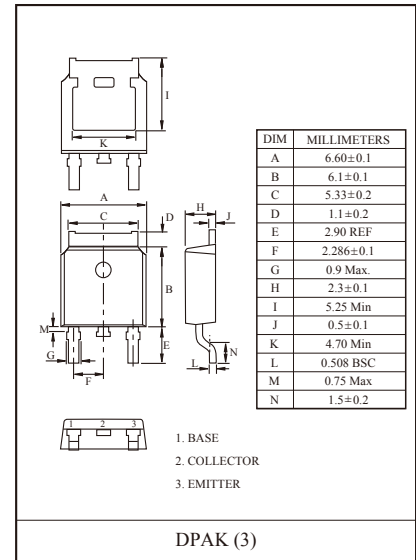
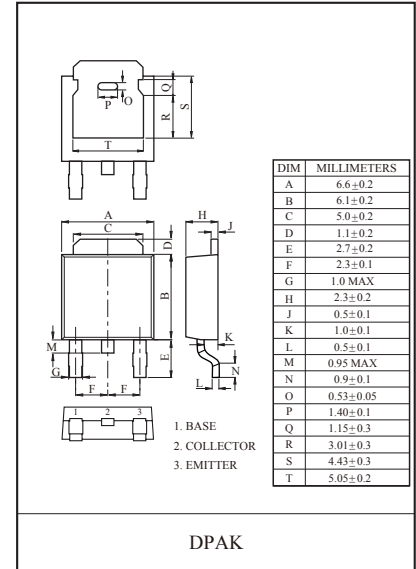
## LED DRIVE APPLICATION

### FEATURES

- Adoption of MBIT processes.
- Low collector-to-emitter saturation voltage.
- Fast switching speed.
- Suffix U : Qualified to AEC-Q101.  
ex) KTC2825D-RTF/HU

### MAXIMUM RATING (Ta=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V <sub>CBO</sub>	60	V
Collector-Emitter Voltage	V <sub>CEO</sub>	60	V
Emitter-Base Voltage	V <sub>EBO</sub>	6	V
Collector Current	I <sub>C</sub>	3	A
Collector Current(Pulse)	I <sub>CP</sub>	6	A
Base Current	I <sub>B</sub>	600	mA
Collector Power Dissipation	T <sub>a</sub> =25°C	P <sub>C</sub>	1 W
	T <sub>C</sub> =25°C	P <sub>C</sub>	15 W
Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature Range	T <sub>stg</sub>	-55 ~ 150	°C

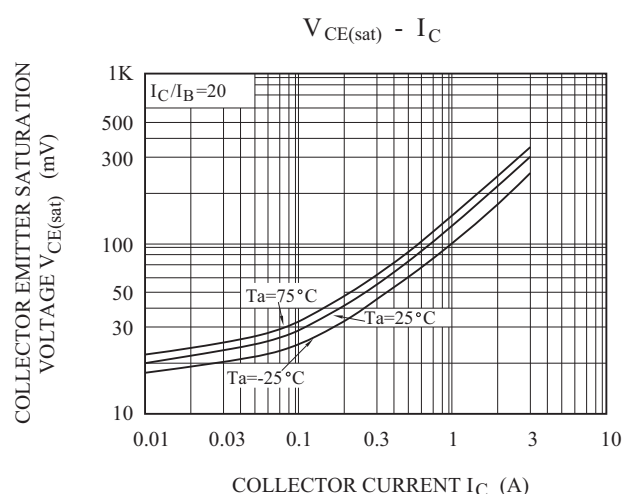
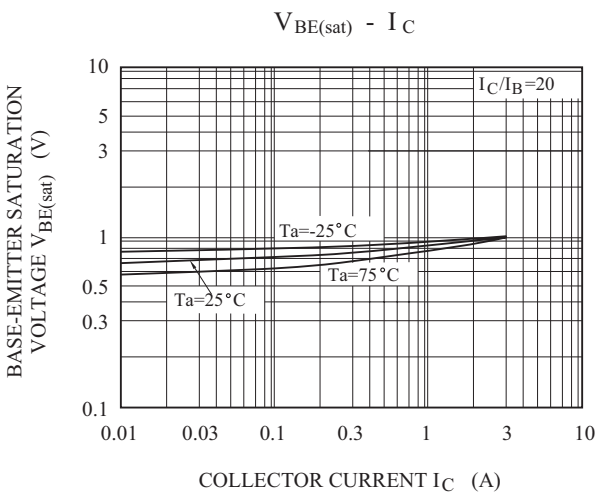
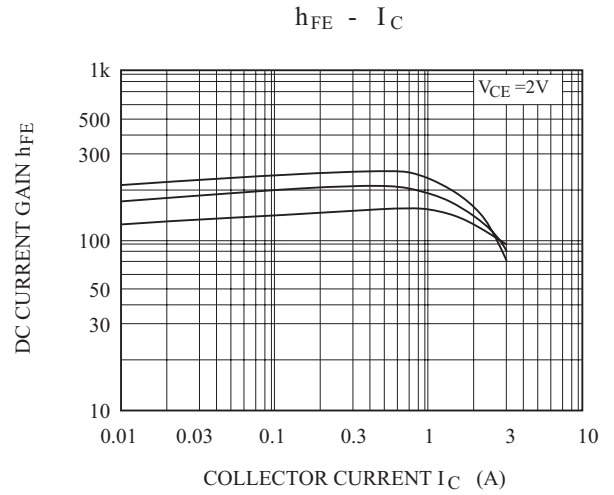
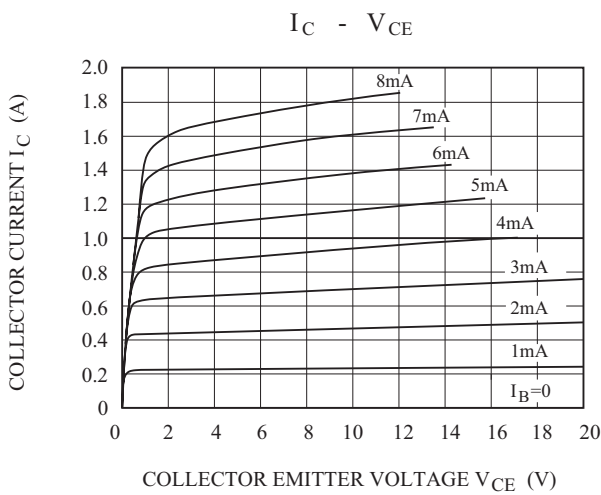
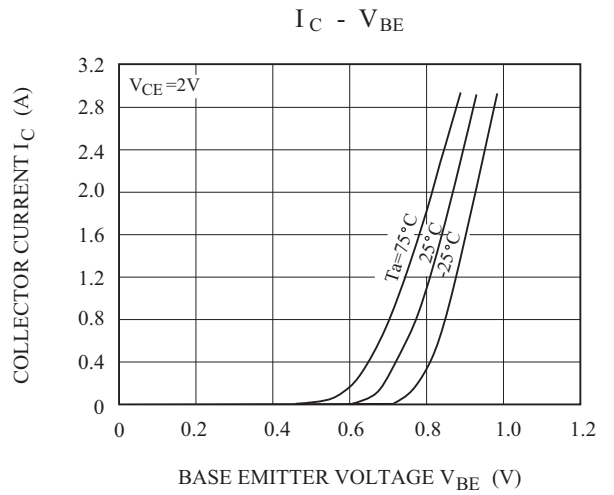
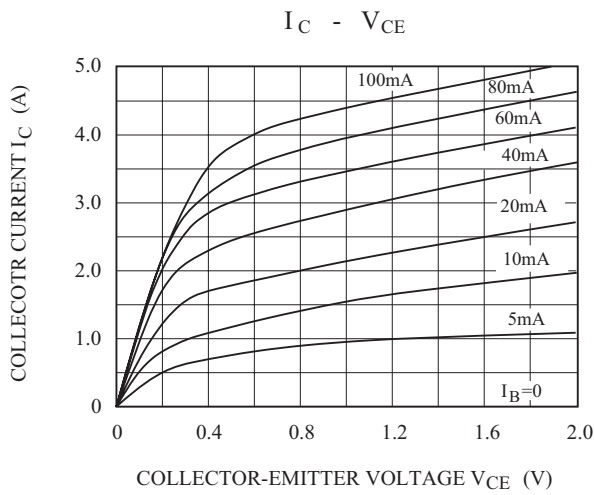


### ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT.
Collector Cut-off Current	I <sub>CBO</sub>	V <sub>CB</sub> =40V, I <sub>E</sub> =0	-	-	1	μA
Emitter Cut-off Current	I <sub>EBO</sub>	V <sub>EB</sub> =4V, I <sub>C</sub> =0	-	-	1	μA
DC Current Gain	h <sub>FE</sub> (1)	V <sub>CE</sub> =2V, I <sub>C</sub> =100mA	200	-	400	
	h <sub>FE</sub> (2)	V <sub>CE</sub> =2V, I <sub>C</sub> =3A	35	-	-	
Collector-Emitter Saturation Voltage	V <sub>CE(sat)</sub> (1)	I <sub>C</sub> =2A, I <sub>B</sub> =100 mA	-	0.19	0.5	V
	V <sub>CE(sat)</sub> (2)	I <sub>C</sub> =360mA, I <sub>B</sub> =2 mA	-	-	0.3	
Base-Emitter Saturation Voltage	V <sub>BE(sat)</sub>	I <sub>C</sub> =2A, I <sub>B</sub> =100 mA	-	0.94	1.2	V
Collector Output Capacitance	C <sub>ob</sub>	V <sub>CB</sub> =10V, f=1MHz, I <sub>E</sub> =0	-	25	-	pF
Switching Time	Turn-on Time	t <sub>on</sub>	-	35	-	nS
	Storage Time	t <sub>stg</sub>	-	470	-	
	Fall Time	t <sub>f</sub>	-	90	-	

PW=20μs  
DC≤1%  
10|I<sub>B1</sub>|=-10|I<sub>B2</sub>|=I<sub>C</sub>=1A

# KTC2825D



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