

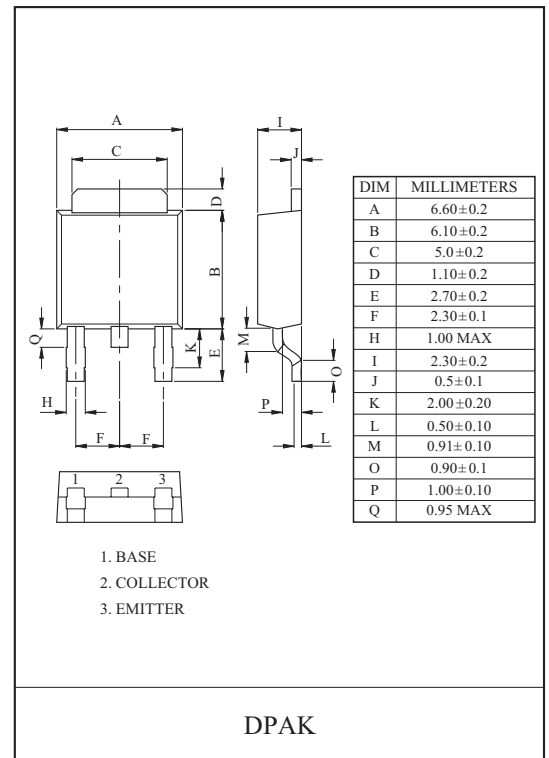
POWER AMPLIFIER APPLICATION.
POWER SWITCHING APPLICATION.

FEATURES

- Low Collector Saturation Voltage
: $V_{CE(sat)}=0.5V(\text{Max.}) (I_C=1A)$
- High Speed Switching Time : $t_{stg}=1 \mu\text{s}(\text{Typ.})$
- Complementary to KTA1718D.
- Suffix U : Qualified to AEC-Q 101
ex) KTC2815D-O-RTF/HU

MAXIMUM RATING (Ta=25)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	50	V
Collector-Emitter Voltage	V_{CEO}	50	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	2	A
Emitter Current	I_E	-2	A
Collector Power Dissipation	P_C	Ta=25	1.0
		Tc=25	10
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	



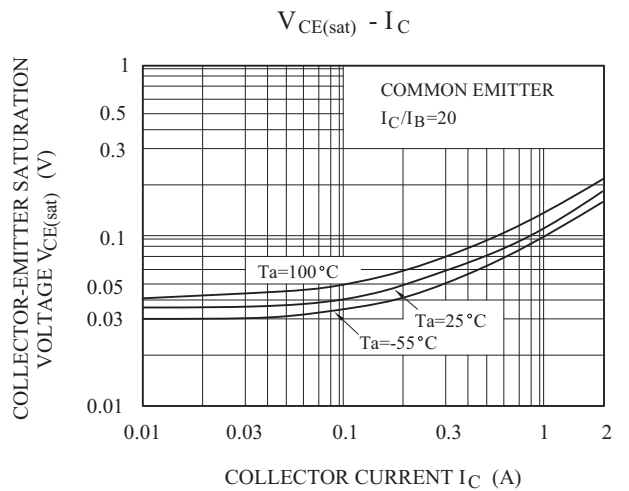
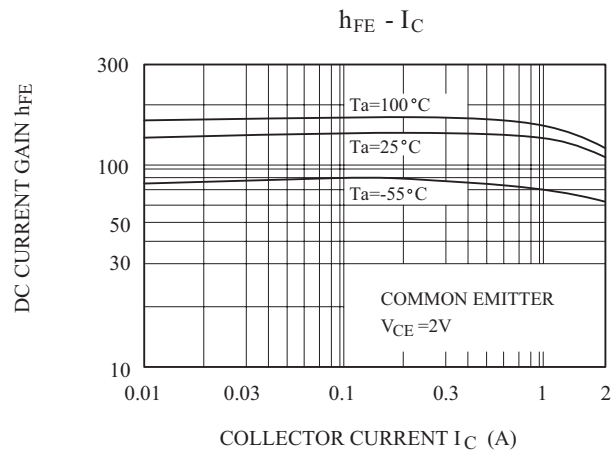
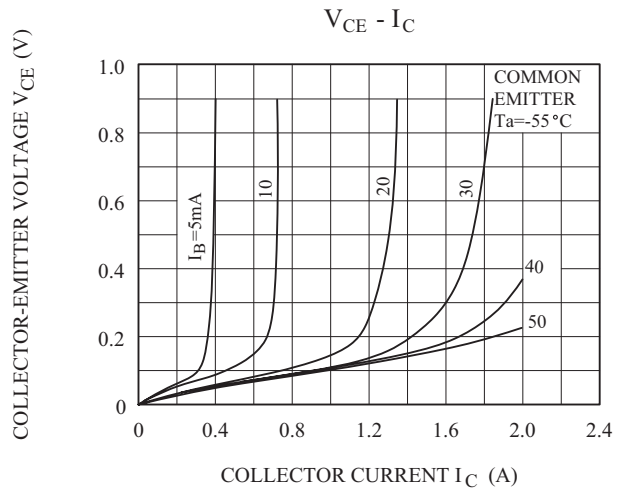
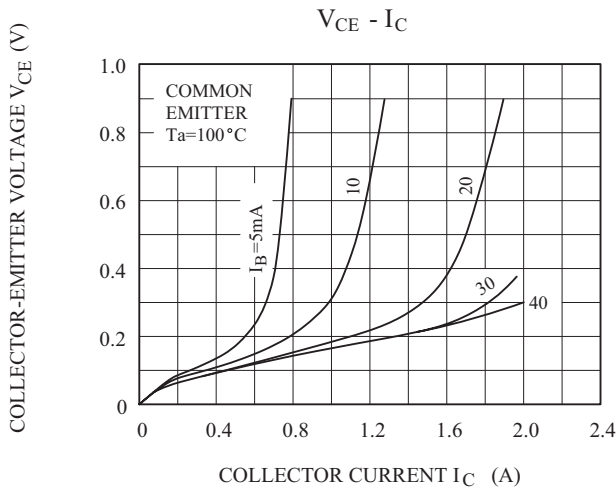
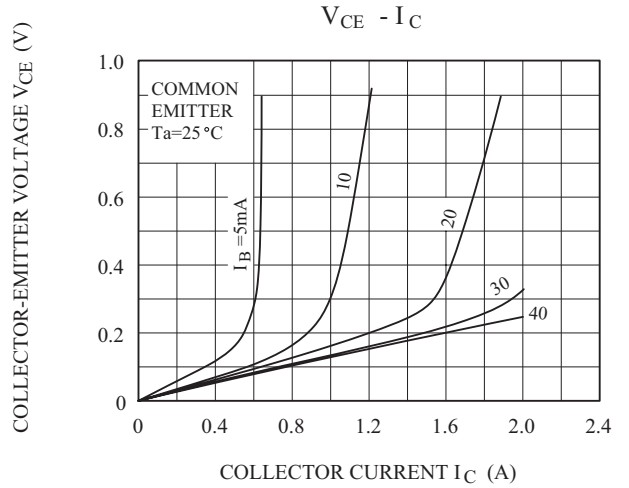
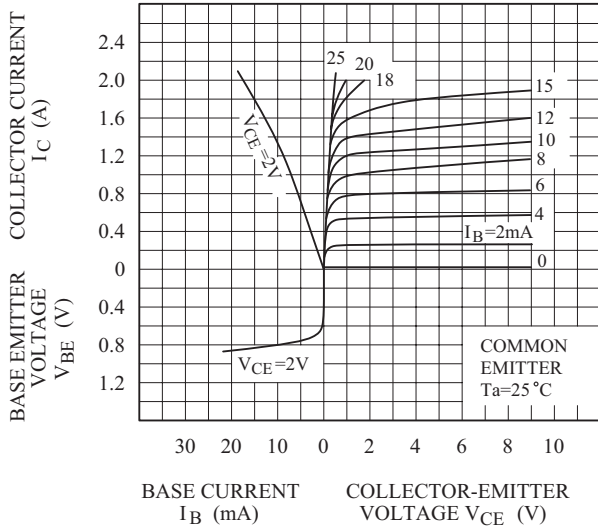
ELECTRICAL CHARACTERISTICS (Ta=25)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB}=50V, I_E=0$	-	-	0.1	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=5V, I_C=0$	-	-	0.1	μA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=10\text{mA}, I_B=0$	50	-	-	V
DC Current Gain	$h_{FE(1)}$ (Note)	$V_{CE}=2V, I_C=0.5A$	70	-	240	
	h_{FE2}	$V_{CE}=2V, I_C=1.5A$	40	-	-	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=1A, I_B=0.05A$	-	-	0.5	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=1A, I_B=0.05A$	-	-	1.2	V
Transition Frequency	f_T	$V_{CE}=2V, I_C=0.5A$	-	100	-	MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=10V, I_E=0, f=1\text{MHz}$	-	30	-	pF
Switching Time	Turn On Time	t_{on}	-	0.1	-	μs
	Storage Time	t_{stg}	-	1.0	-	
	Fall Time	t_f	-	0.1	-	

Note : $h_{FE(1)}$ Classification O:70~140, Y:120~240.

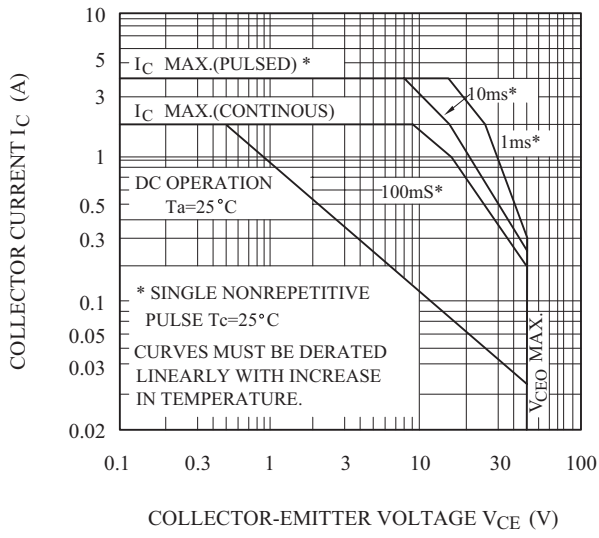
KTC2815D

STATIC CHARACTERISTICS



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SAFE OPERATING AREA



$P_c - T_a$

