

KEC

SEMICONDUCTOR
TECHNICAL DATA

KTC801U

EPITAXIAL PLANAR NPN TRANSISTOR

GENERAL PURPOSE APPLICATION.

SWITCHING APPLICATION.

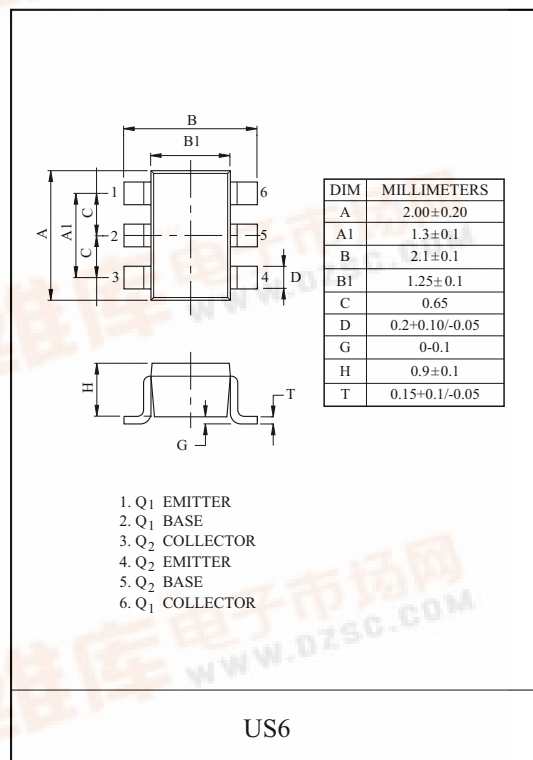
FEATURES

- A super-minimold package houses 2 transistor.
- Excellent temperature response between these 2 transistor.
- High pairing property in h_{FE} .
- The follwing characteristics are common for Q_1 , Q_2 .

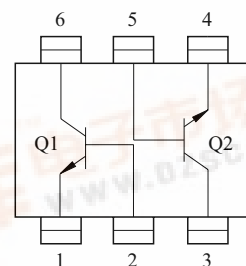
MAXIMUM RATING ($T_a=25^\circ\text{C}$)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	60	V
Collector-Emitter Voltage	V_{CEO}	50	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	150	mA
Base Current	I_B	30	mA
Collector Power Dissipation	P_C^*	200	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55 ~ 150	$^\circ\text{C}$

* Total Rating



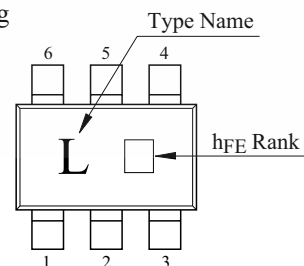
EQUIVALENT CIRCUIT (TOP VIEW)

ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$)

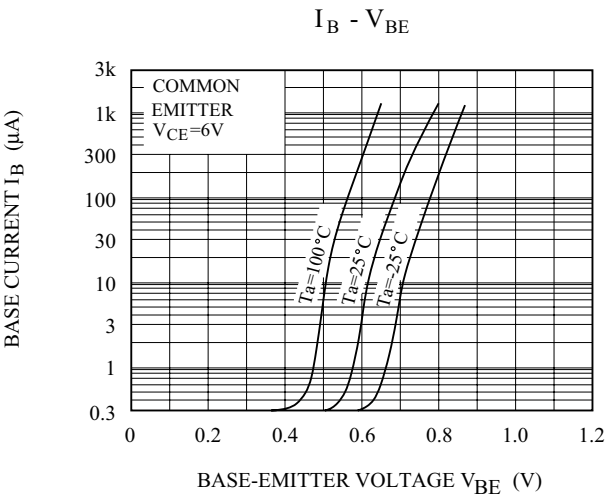
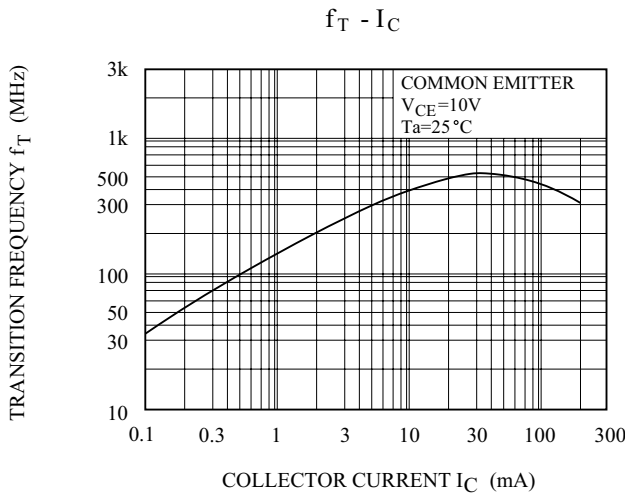
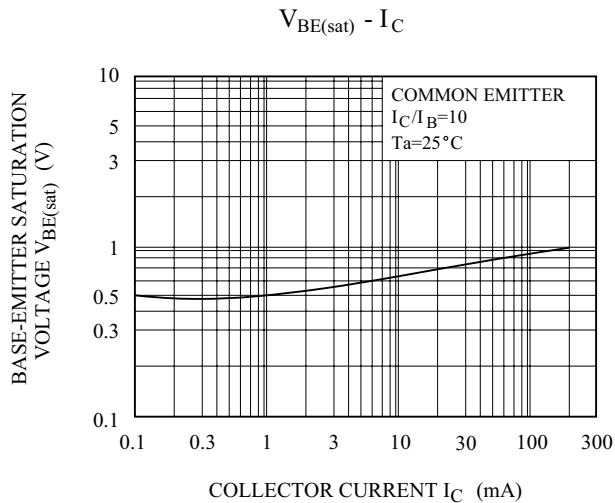
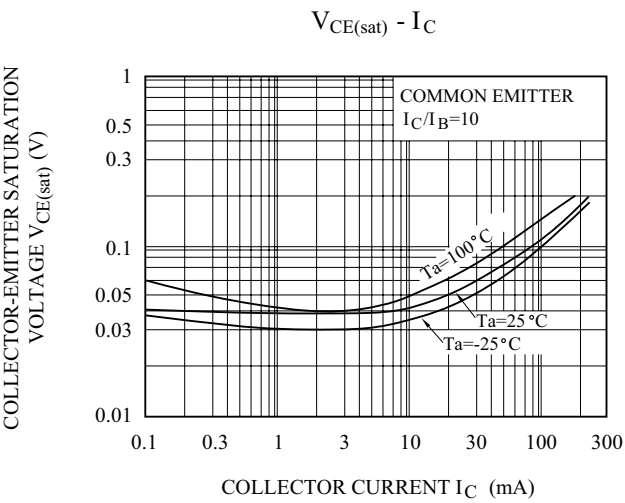
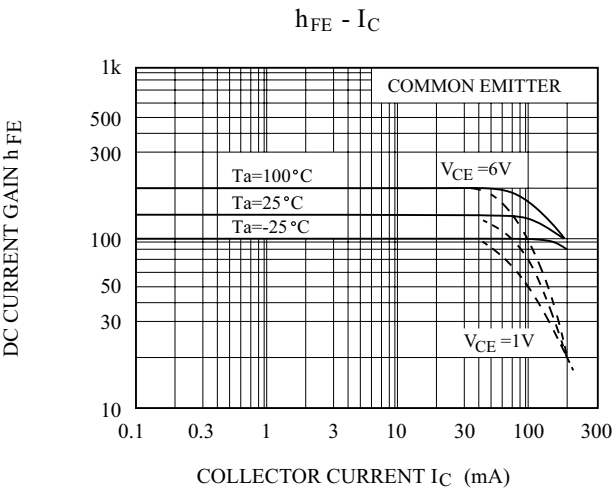
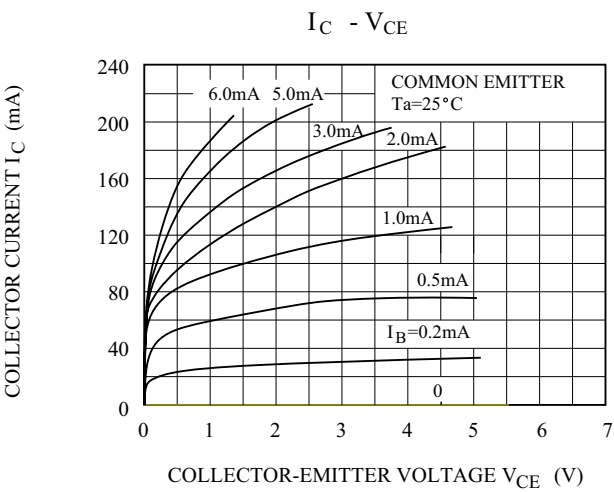
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT.
Collector Cut-off Current	I_{CBO}	$V_{CB}=60\text{V}$, $I_E=0$	-	-	0.1	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=5\text{V}$, $I_C=0$	-	-	0.1	μA
DC Current Gain	h_{FE} (Note)	$V_{CE}=6\text{V}$, $I_C=2\text{mA}$	120	-	400	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=100\text{mA}$, $I_B=10\text{mA}$	-	0.1	0.25	V
Transition Frequency	f_T	$V_{CE}=10\text{V}$, $I_C=1\text{mA}$	80	-	-	MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=10\text{V}$, $I_E=0$, $f=1\text{MHz}$	-	2	3.5	pF
Noise Figure	NF	$V_{CE}=6\text{V}$, $I_C=0.1\text{mA}$, $f=1\text{kHz}$, $R_g=10\text{k}\Omega$	-	1.0	10	dB

Note : h_{FE} Classification Y(4):120 ~ 240, GR(6):200 ~ 400

Marking



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