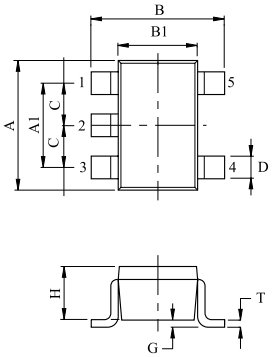
KTA501U

EPITAXIAL PLANAR PNP 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.



DIM	MILLIMETERS
A	2.00±0.20
A1	1.3±0.1
B	2.1±0.1
B1	1.25±0.1
C	0.65
D	0.2+0.10/-0.05
G	0-0.1
H	0.9±0.1
T	0.15+0.1/-0.05

1. Q_1 BASE
2. Q_1, Q_2 EMITTER
3. Q_2 BASE
4. Q_2 COLLECTOR
5. Q_1 COLLECTOR

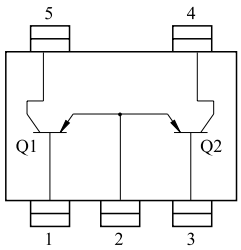
USV

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	-150	mA
Base Current	I_B	-30	mA
Collector Power Dissipation	P_C *	200	W
Junction Temperature	T_j	150	℃
Storage Temperature Range	T_{stg}	-55 150	℃

* Total Rating.

EQUIVALENT CIRCUIT (TOP VIEW)

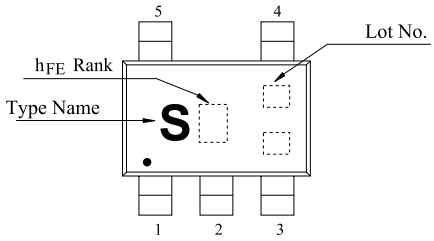


ELECTRICAL CHARACTERISTICS (Ta=25℃)

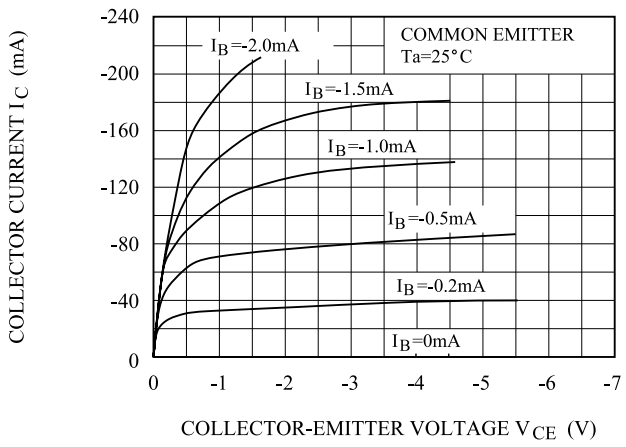
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT.
Collector Cut-off Current	I_{CBO}	V_{CB}=-50V, I_E=0	-	-	-0.1	μA
Emitter Cut-off Current	I_{EBO}	V_{EB}=-5V, I_C=0	-	-	-0.1	μA
DC Current Gain	h_{FE} (Note)	V_{CE}=-6V, I_C=-2mA	120	-	400	
Collector-EmitterSaturation Voltage	$V_{CE(sat)}$	I_C=-100mA, I_B=-10mA	-	-0.1	-0.30	V
Transition Frequency	f_T	V_{CE}=-10V, I_C=-1mA	80	-	-	MHz
Collector Output Capacitance	C_{ob}	V_{CB}=-10V, I_E=0, f=1MHz	-	4	7	pF
Noise Figure	NF	V_{CE}=-6V, I_C=-0.1mA, f=1kHz, Rg=10kΩ	-	1.0	10	dB

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

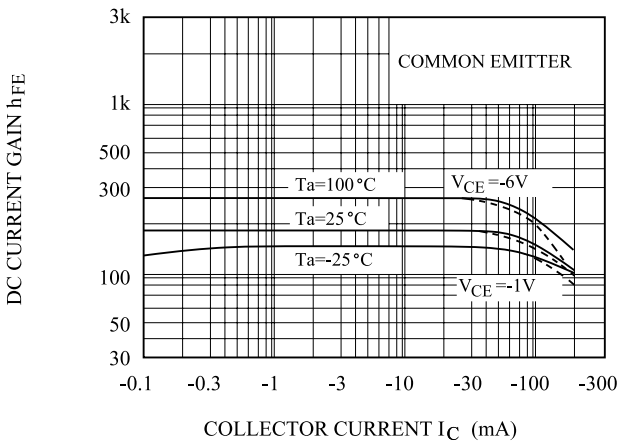
Marking



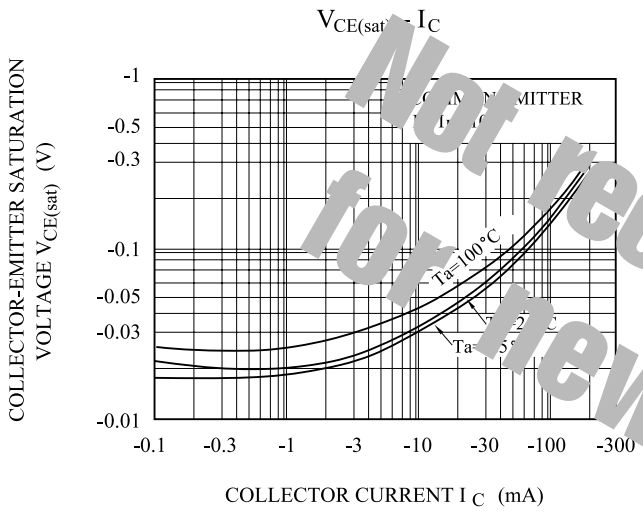
I_C - V_{CE}



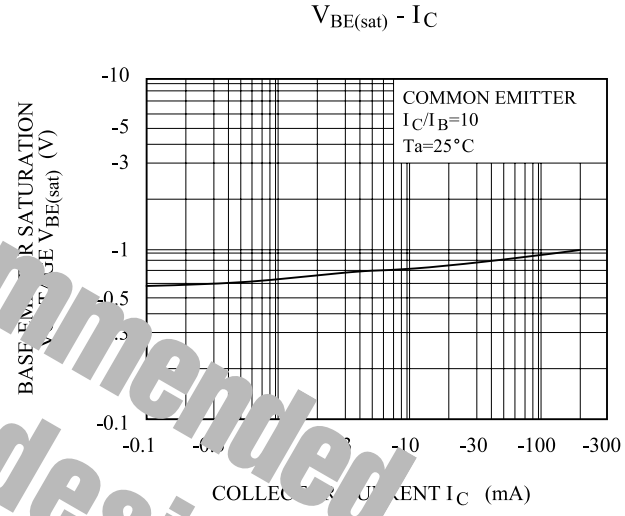
h_{FE} - I_C



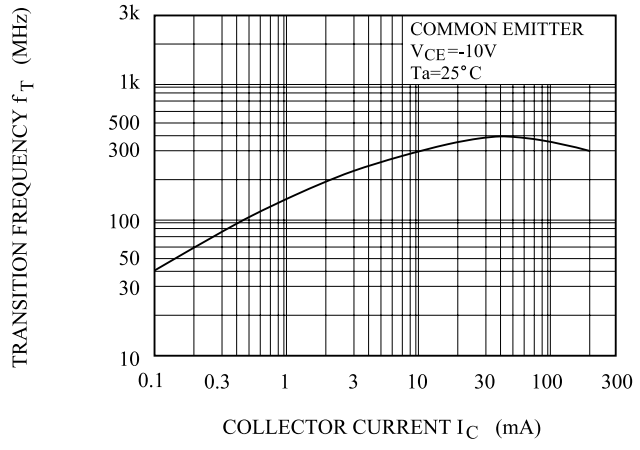
$V_{CE(sat)}$ - I_C



$V_{BE(sat)}$ - I_C



f_T - I_C



I_B - V_{BE}