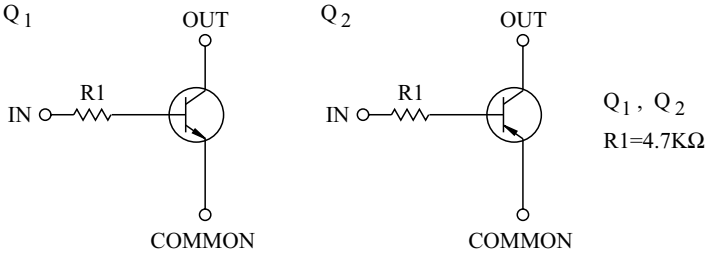
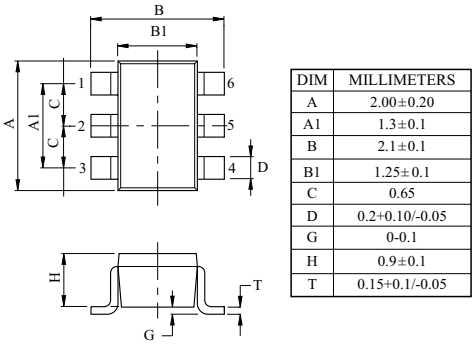
SWITCHING APPLICATION.
INTERFACE CIRCUIT AND DRIVER CIRCUIT APPLICATION.

FEATURES

- Including two devices in US6.
  (Ultra Super mini type with 6 leads.)
- With Built-in bias resistors.
- Simplify circuit design.
- Reduce a quantity of parts and manufacturing process.

EQUIVALENT CIRCUIT



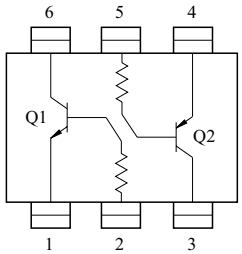


DIM	MILLIMETERS
A	2.00±0.20
A1	1.3±0.1
B	2.1±0.1
B1	1.25±0.1
C	0.65
D	0.2+0.10/-0.05
G	0-0.1
H	0.9±0.1
T	0.15+0.1/-0.05

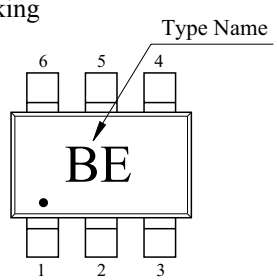
1. Q_1 COMMON (EMITTER)
2. Q_1 IN (BASE)
3. Q_2 OUT (COLLECTOR)
4. Q_2 COMMON (EMITTER)
5. Q_2 IN (BASE)
6. Q_1 OUT (COLLECTOR)

US6

EQUIVALENT CIRCUIT (TOP VIEW)



Marking



Q1 MAXIMUM RATING (Ta=25℃)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collectoor-Base Voltage	V_{CBO}	50	V
Collector-Emitter Voltage	V_{CEO}	50	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	100	mA

Q2 MAXIMUM RATING (Ta=25℃)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collectoor-Base Voltage	V_{CBO}	-50	V
Collector-Emitter Voltage	V_{CEO}	-50	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current	I_C	-100	mA

Q1, Q2 MAXIMUM RATING (Ta=25℃)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector Power Dissipation	P_C *	200	mW
Junction Temperature	T_j	150	℃
Storage Temperature Range	T_{stg}	-55～150	℃

* Total Raing.

Q1 ELECTRICAL CHARACTERISTICS (Ta=25℃)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT.
Collector Cut-off Current		I_{CBO}	V_{CB}=50V, I_E=0	-	-	100	nA
Emitter Cut-off Current		I_{EBO}	V_{EB}=5V, I_C=0	-	-	100	nA
DC Current Gain		h_{FE}	V_{CE}=5V, I_C=1㎃	120	-	-	
Collector-Emitter Saturation Voltage		$V_{CE(sat)}$	I_C=10㎃, I_B=0.5㎃	-	0.1	0.3	V
Transition Frequency		f_T *	V_{CE}=10V, I_C=5㎃	-	250	-	㎒
Input Resistor		R_1		-	4.7	-	kΩ
Switching Time	Ries time	t_r	V_O=5V, V_{IN}=5V, R_L=1kΩ	-	0.025	-	㎲
	Storage Time	t_{stg}		-	3.0	-	
	Fall Time	t_f		-	0.2	-	

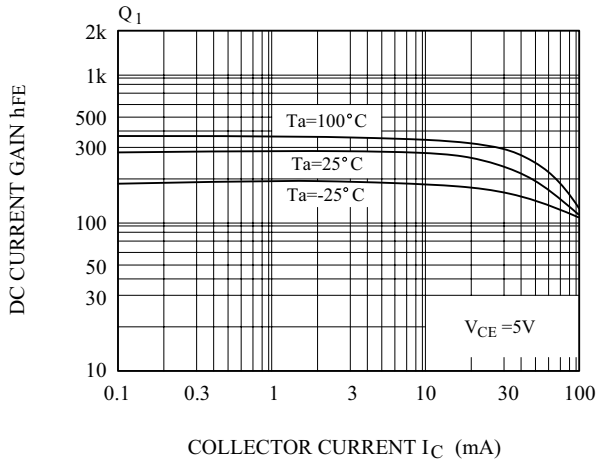
Note : * Characteristic of Transistor Only.

Q2 ELECTRICAL CHARACTERISTICS (Ta=25℃)

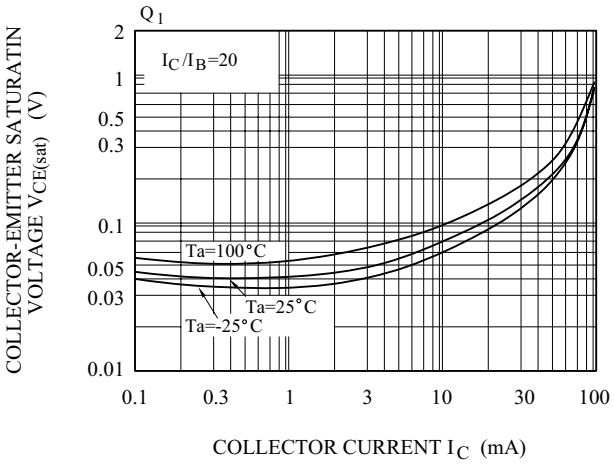
CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT.
Collector Cut-off Current		I_{CBO}	V_{CB}=-50V, I_E=0	-	-	-100	nA
Emitter Cut-off Current		I_{EBO}	V_{EB}=-5V, I_C=0	-	-	-100	nA
DC Current Gain		h_{FE}	V_{CE}=-5V, I_C=-1㎃	120	-	-	
Collector-Emitter Saturation Voltage		$V_{CE(sat)}$	I_C=-10㎃, I_B=-0.5㎃	-	-0.1	-0.3	V
Transition Frequency		f_T *	V_{CE}=-10V, I_C=-5㎃	-	250	-	㎒
Input Resistor		R_1		-	4.7	-	kΩ
Switching Time	Ries time	t_r	V_O=-5V, V_{IN}=-5V, R_L=1kΩ	-	0.2	-	㎲
	Storage Time	t_{stg}		-	2.0	-	
	Fall Time	t_f		-	0.3	-	

Note : * Characteristic of Transistor Only.

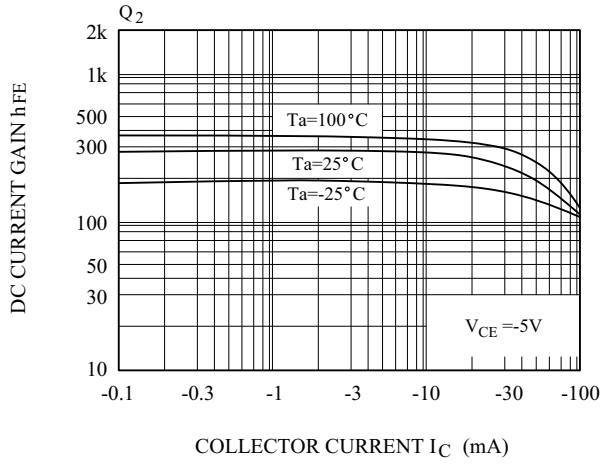
h_{FE} - I_C



$V_{CE(sat)}$ - I_C



h_{FE} - I_C



$V_{CE(sat)}$ - I_C

