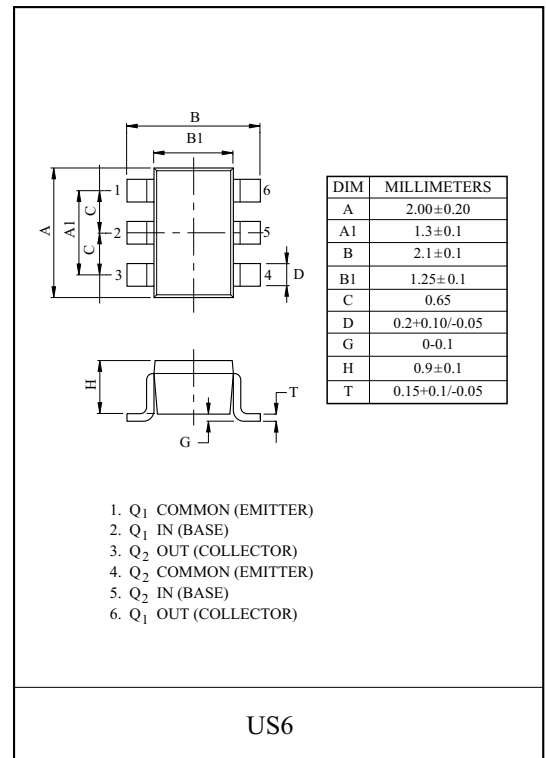
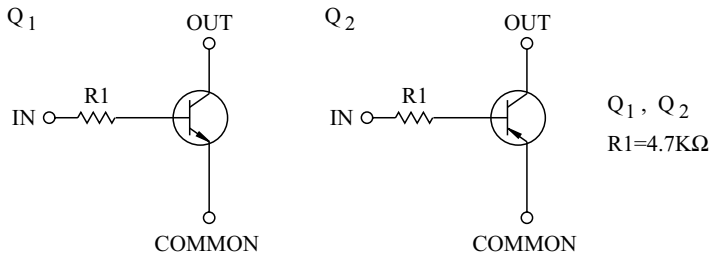


SWITCHING APPLICATION.
INTERFACE CIRCUIT AND DRIVER CIRCUIT APPLICATION.

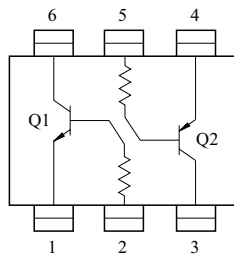
FEATURES

- 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.

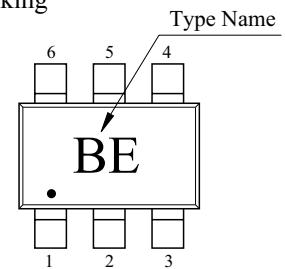
EQUIVALENT CIRCUIT



EQUIVALENT CIRCUIT (TOP VIEW)



Marking



Q1 MAXIMUM RATING (Ta=25 °C)

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	100	mA

Q2 MAXIMUM RATING (Ta=25 °C)

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	-100	mA

Q1, Q2 MAXIMUM RATING (Ta=25 °C)

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

* Total Raing.

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Q1 ELECTRICAL CHARACTERISTICS (Ta=25 °C)

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}	$V_{CE}=5V, I_C=1mA$	120	-	-	
Collector-Emitter Saturation Voltage		$V_{CE(sat)}$	$I_C=10mA, I_B=0.5mA$	-	0.1	0.3	V
Transition Frequency		f_T^*	$V_{CE}=10V, I_C=5mA$	-	250	-	MHz
Input Resistor		R_1		-	4.7	-	k Ω
Switching Time	Ries time	t_r	$V_O=5V, V_{IN}=5V, R_L=1k\Omega$	-	0.025	-	μS
	Storage Time	t_{stg}		-	3.0	-	
	Fall Time	t_f		-	0.2	-	

Note : * Characteristic of Transistor Only.

Q2 ELECTRICAL CHARACTERISTICS (Ta=25 °C)

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}	$V_{CE}=-5V, I_C=-1mA$	120	-	-	
Collector-Emitter Saturation Voltage		$V_{CE(sat)}$	$I_C=-10mA, I_B=-0.5mA$	-	-0.1	-0.3	V
Transition Frequency		f_T^*	$V_{CE}=-10V, I_C=-5mA$	-	250	-	MHz
Input Resistor		R_1		-	4.7	-	k Ω
Switching Time	Ries time	t_r	$V_O=-5V, V_{IN}=-5V, R_L=1k\Omega$	-	0.2	-	μS
	Storage Time	t_{stg}		-	2.0	-	
	Fall Time	t_f		-	0.3	-	

Note : * Characteristic of Transistor Only.

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