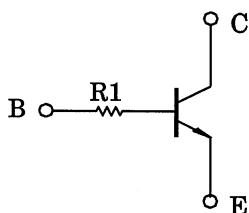


Switching, Inverter Circuit, Interface Circuit
and Driver Circuit Applications

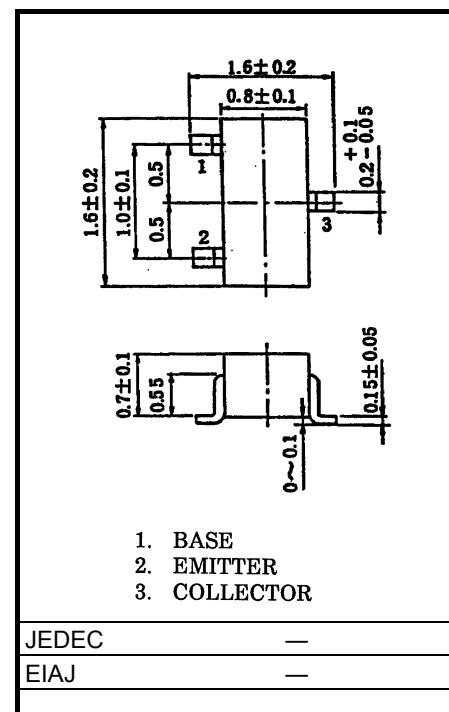
Unit: mm

Equivalent Circuit



Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

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
Collector power dissipation	P_c	100	mW
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature range	T_{stg}	-55~150	$^\circ\text{C}$



Weight: 2.4mg

Electrical Characteristics ($T_a = 25^\circ\text{C}$)

Characteristic	Symbol	Test Circuit	Test Condition	Min	Typ.	Max	Unit
Collector cut-off current	I_{CBO}	—	$V_{CB} = 50 \text{ V}, I_E = 0$	—	—	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}	—	$V_{CE} = 5 \text{ V}, I_C = 1 \text{ mA}$	120	—	700	—
Collector-emitter saturation voltage	$V_{CE(\text{sat})}$	—	$I_C = 5 \text{ mA}, I_B = 0.25 \text{ mA}$	—	0.1	0.3	V
Translation frequency	f_T	—	$V_{CE} = 10 \text{ V}, I_C = 5 \text{ mA}$	—	250	—	MHz
Collector output capacitance	C_{ob}	—	$V_{CB} = 10 \text{ V}, I_E = 0, f = 1 \text{ MHz}$	—	3	6	pF
Input resistor	HB4617R	R1	—	7	10	13	k Ω

