

For low-frequency power amplification

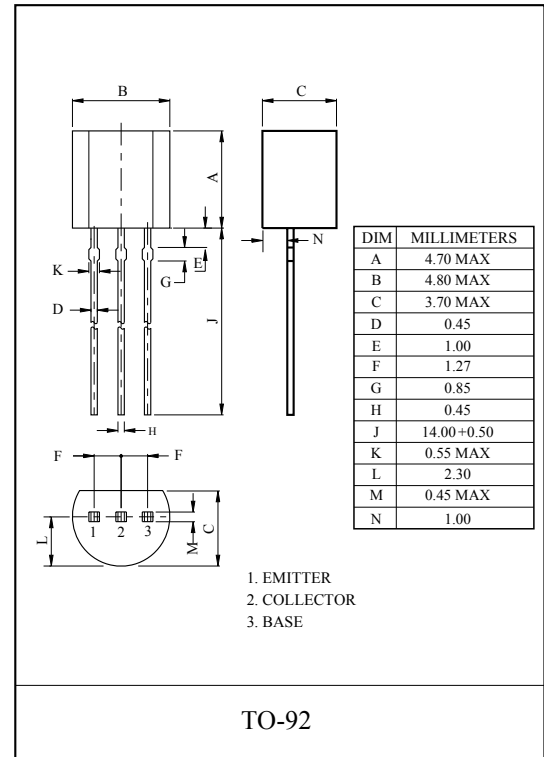
For stroboscope

■ Features

- Low collector-emitter saturation voltage  $V_{CE(sat)}$
- Satisfactory operation performances at high efficiency with the low-voltage power supply.

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

Parameter	Symbol	Rating	Unit
Collector-base voltage (Emitter open)	$V_{CBO}$	20	V
Collector-emitter voltage (Base open)	$V_{CEO}$	20	V
Emitter-base voltage (Collector open)	$V_{EBO}$	6	V
Collector current	$I_C$	2	A
Peak collector current	$I_{CP}$	6	A
Collector power dissipation	$P_C$	900	mW
Junction temperature	$T_j$	150	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-55 to +150	$^\circ\text{C}$



■ Electrical Characteristics  $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector-emitter voltage (Base open)	$V_{CEO}$	$I_C = 1 \text{ mA}, I_B = 0$	20			V
Emitter-base voltage (Collector open)	$V_{EBO}$	$I_E = 10 \mu\text{A}, I_C = 0$	6			V
Collector-base cutoff current (Emitter open)	$I_{CBO}$	$V_{CB} = 16 \text{ V}, I_E = 0$			2	$\mu\text{A}$
Collector-emitter cutoff current (Base open)	$I_{CEO}$	$V_{CE} = 10 \text{ V}, I_B = 0$			1	$\mu\text{A}$
Emitter-base cutoff current (Collector open)	$I_{EBO}$	$V_{EB} = 6 \text{ V}, I_C = 0$			0.2	$\mu\text{A}$
Forward current transfer ratio	$h_{FE1}^*$	$V_{CE} = 2 \text{ V}, I_C = 0.1 \text{ A}$	100		700	
	$h_{FE2}$	$V_{CE} = 2 \text{ V}, I_C = 1 \text{ A}$	150			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 1 \text{ A}, I_B = 0.1 \text{ A}$			0.3	V
Transition frequency	$f_T$	$V_{CB} = 2 \text{ V}, I_C = 10 \text{ mA}$		100		MHz
Collector output capacitance (Common base, input open circuited)	$C_{ob}$	$V_{CB} = 10 \text{ V}, I_E = 0, f = 1 \text{ MHz}$		20		PF

CLASSIFICATION OF  $h_{FE2}$

RANK	A	B	C
RANGE	100-300	250-500	400-700

