

### BC347 TRANSISTOR (NPN)

#### FEATURES

Power dissipation

$$P_{CM}: 0.3 \text{ W (Tamb=25°C)}$$

Collector current

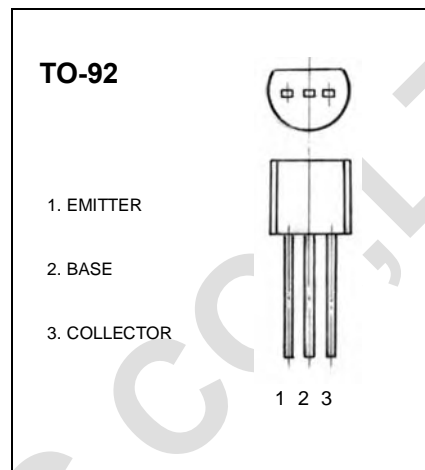
$$I_{CM}: 0.1 \text{ A}$$

Collector-base voltage

$$V_{(BR)CBO}: 50 \text{ V}$$

Operating and storage junction temperature range

$$T_J, T_{stg}: -55°C \text{ to } +150°C$$



#### ELECTRICAL CHARACTERISTICS (Tamb=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = 100\mu A, I_E = 0$	50			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = 1mA, I_B = 0$	45			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = 100\mu A, I_C = 0$	5			V
Collector cut-off current	$I_{CBO}$	$V_{CB} = 50V, I_E = 0$			0.1	$\mu A$
Collector cut-off current	$I_{CEO}$	$V_{CE} = 35V, I_B = 0$			0.1	$\mu A$
Emitter cut-off current	$I_{EBO}$	$V_{EB} = 3V, I_C = 0$			0.1	$\mu A$
DC current gain	$h_{FE}$	$V_{CE} = 5V, I_C = 2mA$	40		450	
Collector-emitter saturation voltage	$V_{CEsat}$	$I_C = 10mA, I_B = 1mA$			0.3	V
Base-emitter saturation voltage	$V_{BEsat}$	$I_C = 10mA, I_B = 1mA$			1	V
Transition frequency	$f_T$	$V_{CE} = 5V, I_C = 10mA, f = 30MHz$	125			MHz