



TO-92 Plastic-Encapsulate Transistors

BF240 TRANSISTOR (NPN)

FEATURES

Power dissipation

$$P_{CM}: 0.3 \text{ W (Tamb=25}^{\circ}\text{C)}$$

Collector current

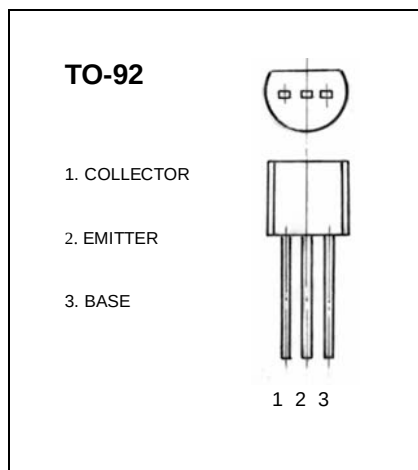
$$I_{CM}: 0.025 \text{ A}$$

Collector-base voltage

$$V_{(BR)CBO}: 40 \text{ V}$$

Operating and storage junction temperature range

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



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

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = 100\mu A, I_E = 0$	40			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = 1 \text{ mA}, I_B = 0$	40			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = 100\mu A, I_C = 0$	4			V
Collector cut-off current	I_{CBO}	$V_{CB} = 20V, I_E = 0$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = 4V, I_C = 0$			0.1	μA
DC current gain	h_{FE}	$V_{CE} = 10V, I_C = 1mA$	67		220	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 10mA, I_B = 1mA$			0.3	V
Collector-emitter voltage	V_{BE}	$V_{CE} = 10V, I_C = 1mA$			0.775	V
Transition frequency	f_T	$V_{CE} = 10V, I_C = 1mA$ $f = 100MHz$	150			MHz