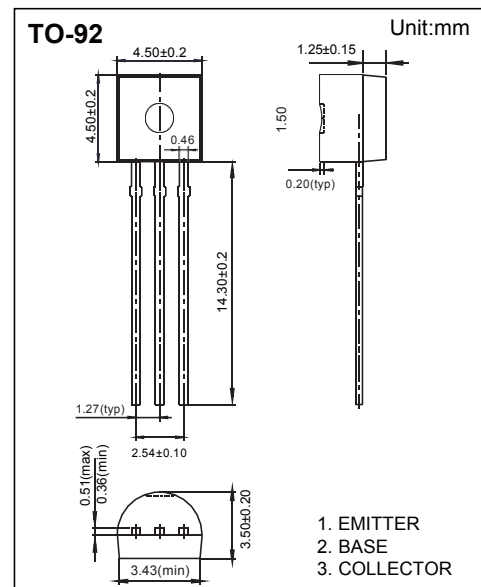


Transistor

NPN General Purpose Transistor BC337

■ Features

- High current (max. 500 mA)
- Low voltage (max. 45 V).



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

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CBO}	50	V
Collector - Emitter Voltage	V_{CEO}	45	
Emitter - Base Voltage	V_{EBO}	5	
Collector Current - Continuous	I_C	500	mA
Peak Collector Current	I_{CM}	1	A
Peak Base Current	I_{BM}	200	mA
Collector Power Dissipation	P_C	625	mW
Thermal Resistance From Junction to Ambient	$R_{\theta JA}$	0.2	K/mW
Junction Temperature	T_J	150	$^{\circ}\text{C}$
Operating Ambient Temperature	T_{amb}	-65 to 150	
Storage Temperature range	T_{stg}	-65 to 150	

Transistor

NPN General Purpose Transistor BC337

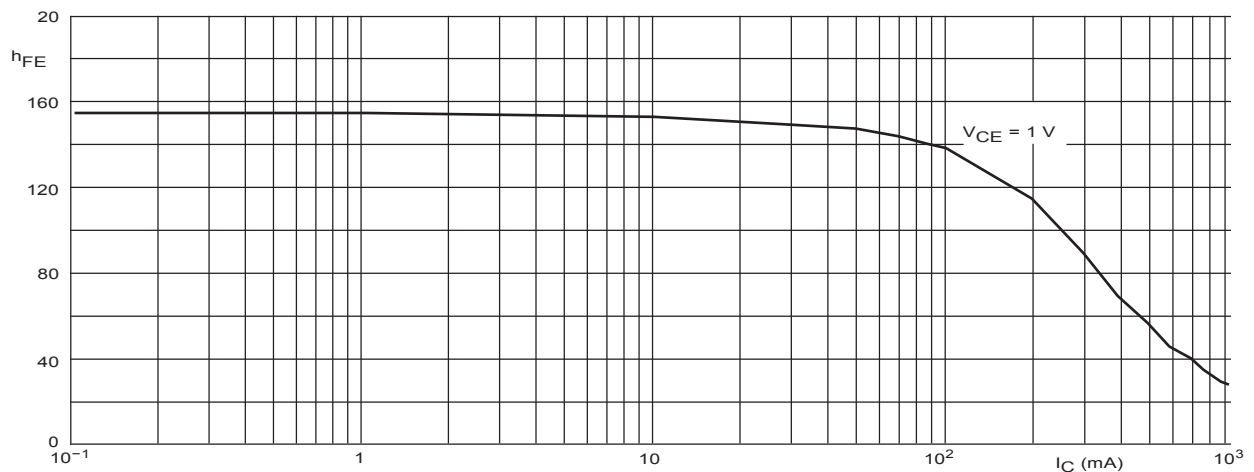
■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V_{CBO}	$I_C = 100\ \mu\text{A}, I_E = 0$	50			V
Collector- emitter breakdown voltage	V_{CEO}	$I_C = 1\ \text{mA}, I_B = 0$	45			
Emitter - base breakdown voltage	V_{EBO}	$I_E = 100\ \mu\text{A}, I_C = 0$	5			
Collector-base cut-off current	I_{CBO}	$V_{CB} = 20\ \text{V}, I_E = 0$			100	nA
		$V_{CB} = 20\ \text{V}, I_E = 0, T_J = 25^\circ\text{C}$			5	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = 5\ \text{V}, I_C = 0$			100	nA
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 500\ \text{mA}, I_B = 50\ \text{mA}$			0.7	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C = 500\ \text{mA}, I_B = 50\ \text{mA}$			1.2	
Base - emitter voltage	V_{BE}	$I_C = 500\ \text{mA}, V_{CE} = 1\ \text{V}$			1.2	
DC current gain	$h_{FE(1)}$	$V_{CE} = 1\ \text{V}, I_C = 100\ \text{mA}$	100		600	
			100		250	
			160		400	
			250		600	
DC current gain	$h_{FE(2)}$	$V_{CE} = 1\ \text{V}, I_C = 500\ \text{mA}$ see Figs 1, 2 and 3	40			
Collector capacitance	C_{ob}	$I_E = I_C = 0, V_{CB} = 10\ \text{V}, f = 1\ \text{MHz}$		10		pF
Transition frequency	f_T	$V_{CE} = 5\ \text{V}, I_C = 10\ \text{mA}, f = 100\ \text{MHz}$	100			MHz

Transistor

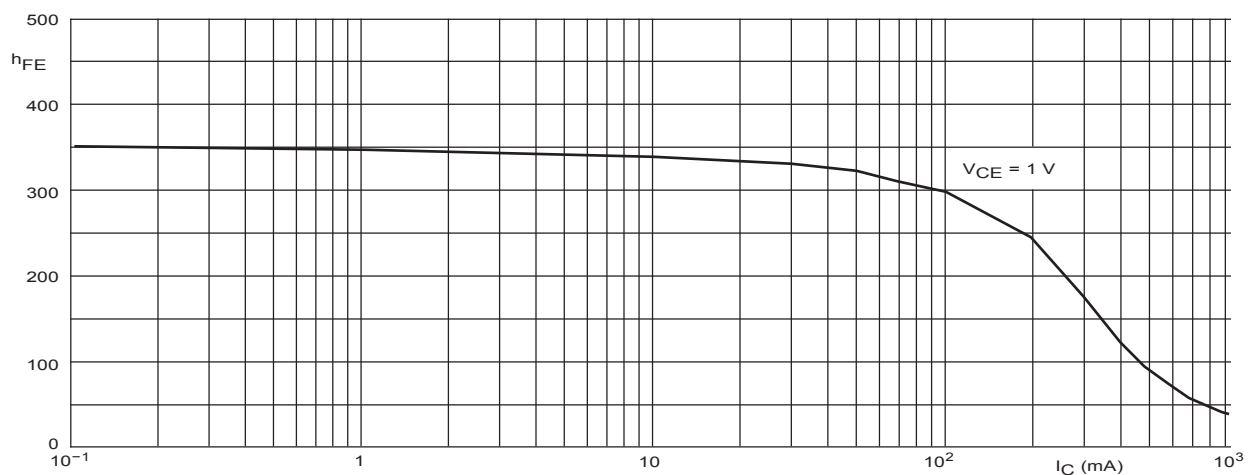
NPN General Purpose Transistor BC337

■ Typical Characteristics



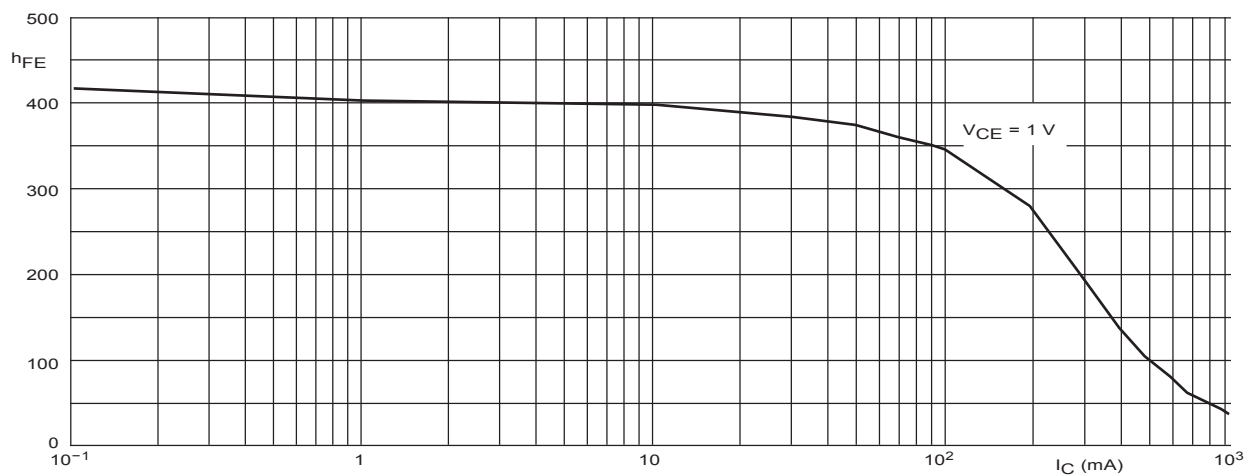
BC337-16.

Fig.1 DC current gain; typical values.



BC337-25.

Fig.2 DC current gain; typical values.



BC337-40.

Fig.3 DC current gain; typical values.