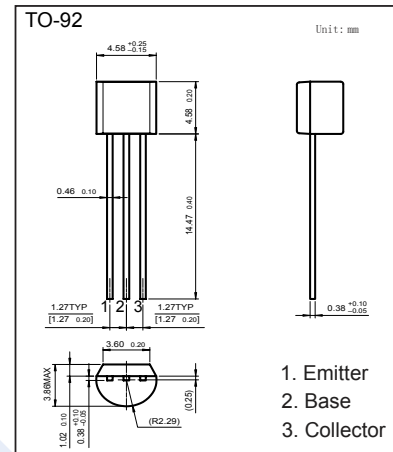
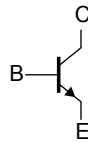


NPN Transistors

BC337 (KC337)

■ Features

- Collector Current Capability $I_C=0.5A$
- Collector Emitter Voltage $V_{CEO}=45V$
- Complement to BC327.

■ 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
Collector Current - Pulse	I_{CP}	1	A
Base Current - Pulse	I_{BP}	200	mA
Collector Power Dissipation	P_C	625	mW
Thermal Resistance From Junction to Ambient	$R_{\theta JA}$	0.2	$^\circ\text{C}/\text{mw}$
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-65 to 150	

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V_{CBO}	$I_C = 100 \mu A, I_E = 0$	50			V
Collector- emitter breakdown voltage	V_{CEO}	$I_C = 1 \text{ mA}, I_B = 0$	45			
Emitter - base breakdown voltage	V_{EBO}	$I_E = 100 \mu A, I_C = 0$	5			
Collector-base cut-off current	I_{CBO}	$V_{CB} = 50 \text{ V}, I_E = 0$			0.1	μA
		$V_{CB} = 50 \text{ V}, I_E = 0, T_J = 150^\circ\text{C}$			5	
Emitter cut-off current	I_{EBO}	$V_{EB} = 5 \text{ V}, I_C = 0$			0.1	
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}	$V_{CE} = 1 \text{ V}, I_C = 500 \text{ mA}$			1.2	
DC current gain	h_{FE}	$V_{CE} = 1 \text{ V}, I_C = 100 \text{ mA}$	100		600	
			100		250	
			160		400	
			250		600	
DC current gain		$V_{CE} = 1 \text{ V}, I_C = 500 \text{ mA}$	40			
Collector output capacitance	C_{ob}	$V_{CB} = 10 \text{ V}, I_E = I_C = 0, f = 1 \text{ MHz}$		5		pF
Transition frequency	f_T	$V_{CE} = 5 \text{ V}, I_C = 10 \text{ mA}, f = 100 \text{ MHz}$	100			MHz

NPN Transistors

BC337 (KC337)

■ Classification of $h_{fe}(1)$

Type	BC337	BC337-16	BC337-25	BC337-40
Range	100-600	100-250	160-400	250-600

■ Typical Characteristics

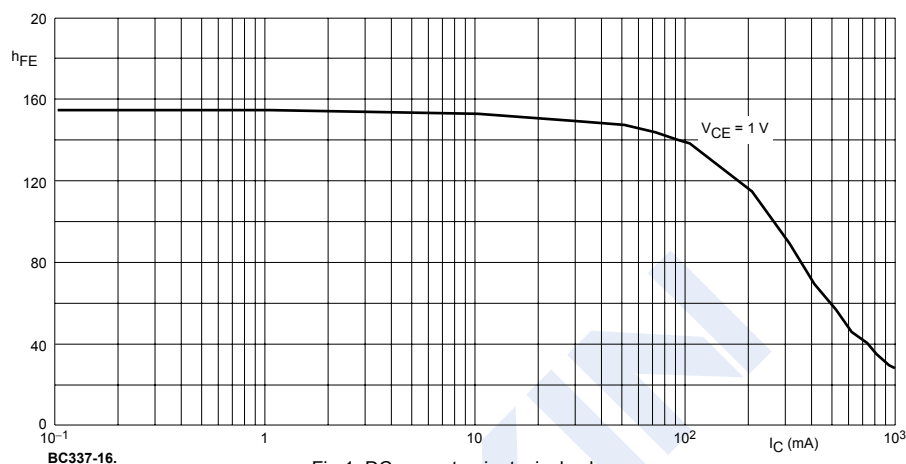


Fig.1 DC current gain; typical values.

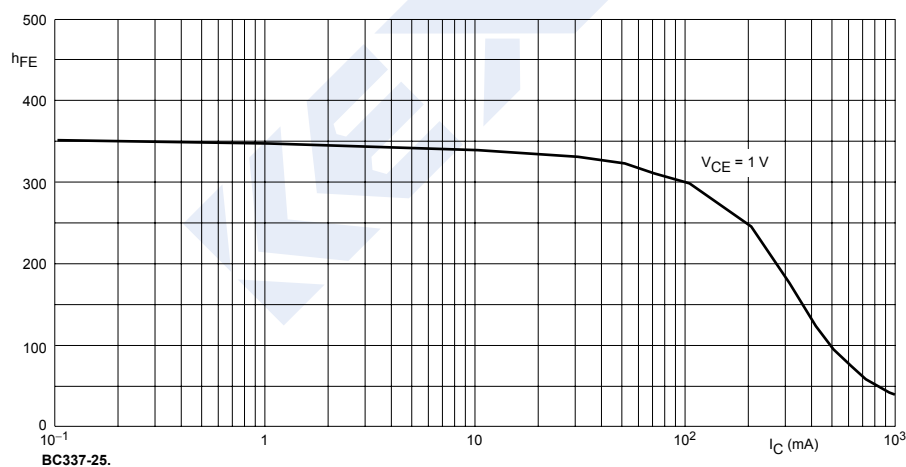


Fig.2 DC current gain; typical values.

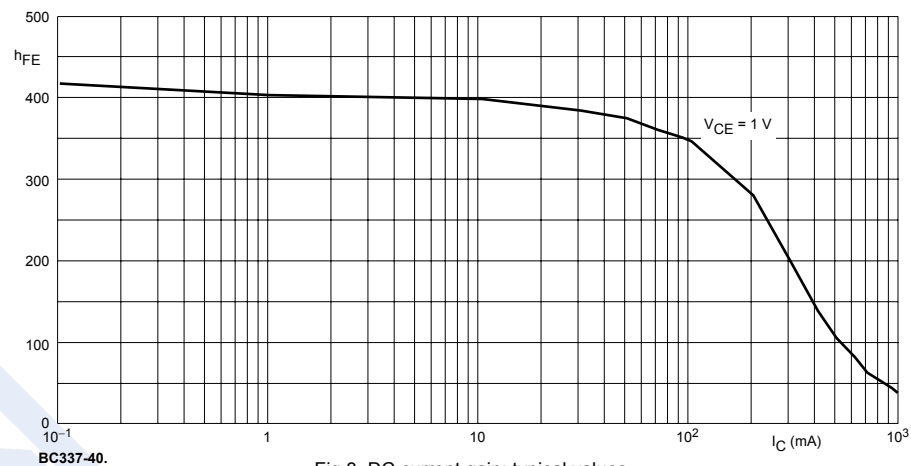


Fig.3 DC current gain; typical values.