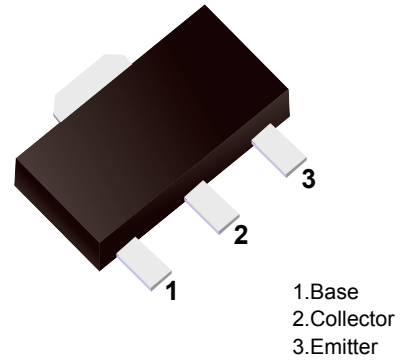


■ PNP Transistors

■ Features

- NPN Complements to BCX54,BCX55,BCX56
- Low Voltage
- High Current



■ Simplified outline(SOT-89)

■ Absolute Maximum Ratings Ta = 25°C

Parameter		Symbol	Rating	Unit
Collector-base voltage	BCX51	V _{CB0}	-45	V
	BCX52		-60	V
	BCX53		-100	V
Collector-emitter voltage	BCX51	V _{CEO}	-45	V
	BCX52		-60	V
	BCX53		-80	V
Emitter-base voltage		V _{EBO}	-5	V
Collector current		I _C	-1	A
Peak collector current		I _{CM}	-1.5	A
Peak base current		I _{BM}	-200	mA
Total power dissipation		P _{tot}	1.3	W
Storage temperature		T _{stg}	-65 to +150	°C
Junction temperature		T _j	150	°C
Operating ambient temperature		T _{amb}	-65 to +150	°C
Thermal resistance from junction to ambient		R _{th(j-a)}	94	K/W
Thermal resistance from junction to solder point		R _{th(j-s)}	14	K/W

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector cutoff current	ICBO	V _{CB} = -30 V, I _E = 0			-100	nA
		V _{CB} = -30 V, I _E = 0; T _j = 125°C			-10	uA
Emitter cutoff current	IEBO	V _{EB} = -5 V, I _C = 0			-100	nA
DC current gain	hFE	I _C = -5 mA; V _{CE} = -2 V	63			
		I _C = -150 mA; V _{CE} = -2 V	63		250	
		I _C = -500 mA; V _{CE} = -2 V	40			
DC current gain BCX51-10,BCX52-10,BCX53-10 BCX51-16,BCX52-16,BCX53-16	hFE	I _C = -150 mA; V _{CE} = -2 V	63		160	
		I _C = -150 mA; V _{CE} = -2 V	100		250	
Collector-emitter saturation voltage	V _{CE(sat)}	I _C = -500 mA; I _B = -50 mA			-500	mV
Base to emitter voltage	V _{BE}	I _C = -500 mA; V _{CE} = -2 V			-1	V
Transition frequency	f _T	I _C = -10 mA; V _{CE} = -5 V; f = 100 MHz		50		MHz

■ hFE Classification

TYPE	BCX51	BCX51-10	BCX51-16
Marking	AA	AC	AD

TYPE	BCX52	BCX52-10	BCX52-16
Marking	AE	AG	AM

TYPE	BCX53	BCX53-10	BCX53-16
Marking	AH	AK	ALK510

■ Typical Characteristics

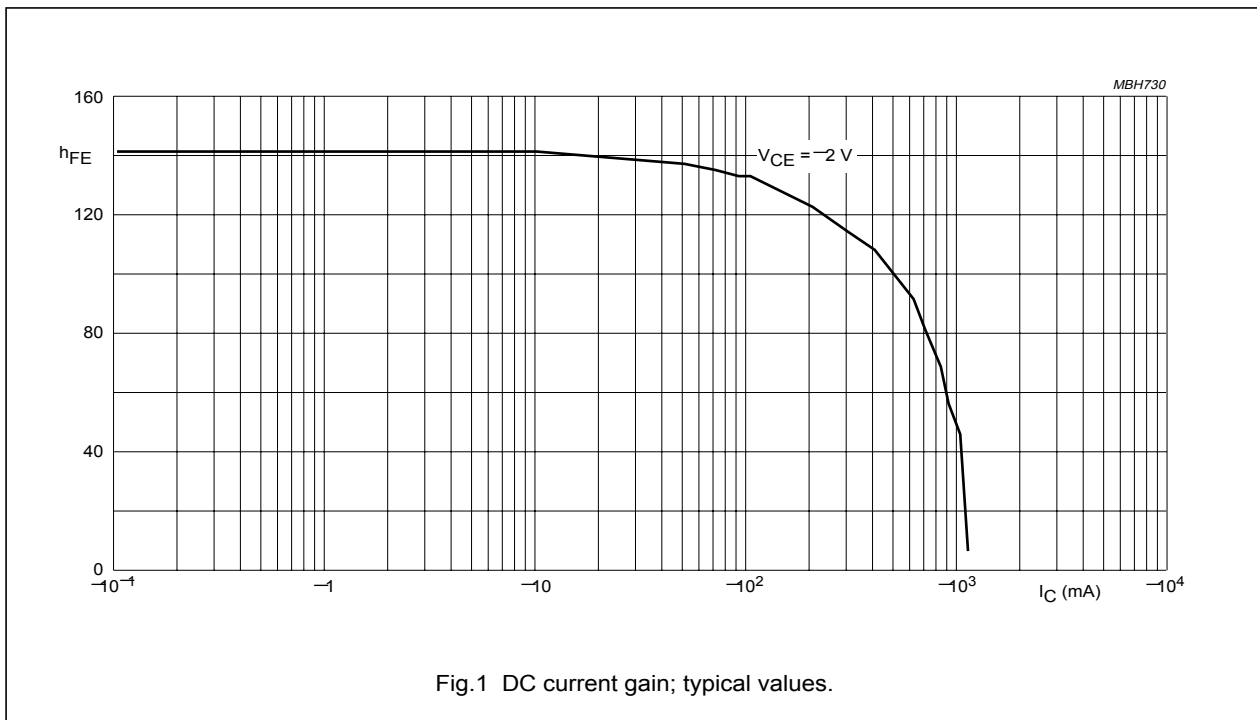
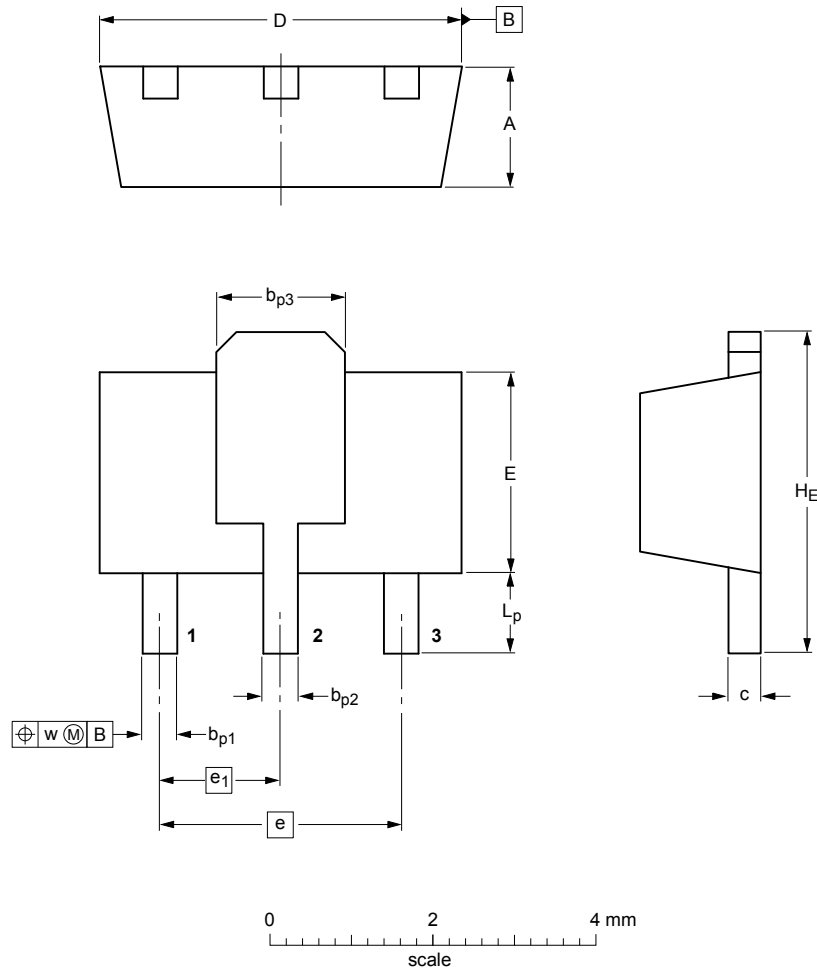


Fig.1 DC current gain; typical values.

Package Outline

SOT-89



DIMENSIONS (mm are the original dimensions)

UNIT	A	b _{p1}	b _{p2}	b _{p3}	c	D	E	e	e ₁	H _E	L _p	w
mm	1.6 1.4	0.48 0.35	0.53 0.40	1.8 1.4	0.44 0.23	4.6 4.4	2.6 2.4	3.0	1.5	4.25 3.75	1.2 0.8	0.13

Summary of Packing Options

Package	Package Description	Packing Quantity	Industry Standard
SOT-89	Tape/Reel, 7" reel	1000	EIA-481-1