

# PNP small signal transistor

## BCX71H

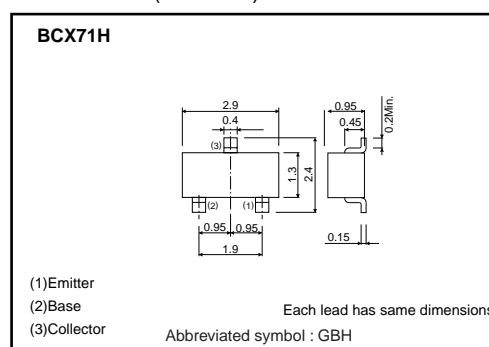
### ●Features

- 1) Ideal for switching and AF amplifier applications.
- 2) Complements the BCX70.

### ●Packaging specifications

Type	Package	Taping
	Code	T116
	Basic ordering unit (pieces)	3000
BCX71H		○

### ●Dimensions (Unit : mm)



### ●Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Collector-base voltage	$V_{CB0}$	-45	V
Collector-emitter voltage	$V_{CE0}$	-45	V
Emitter-base voltage	$V_{EB0}$	-5	V
Collector current	$I_c$	-0.2	A
Collector power dissipation	$P_C$	0.2	W
		0.35	W *
Junction temperature	$T_j$	150	°C
Storage temperature	$T_{stg}$	-55 to 150	°C

\* Mounted on a 7×5×0.6 mm CERAMIC SUBSTRATE

### ●Electrical characteristics (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Collector-emitter breakdown voltage	$BV_{CEO}$	-45	-	-	V	$I_c = -2mA$
Emitter-base breakdown voltage	$BV_{EBO}$	-5	-	-	V	$I_c = -10\mu A$
Collector-emitter cutoff current	$I_{CES}$	-	-	-0.1	$\mu A$	$V_{CE} = -45V$
Emitter-base cutoff current	$I_{EBO}$	-	-	-0.1	$\mu A$	$V_{EB} = -4V$
Collector-emitter saturation voltage	$V_{CE(sat)1}$	-	-	-0.25	V	$I_c/I_B = -10mA / -0.25mA$
	$V_{CE(sat)2}$	-	-	-0.55	V	$I_c/I_B = -50mA / -1.25mA$
Base-emitter saturation voltage	$V_{BE(sat)1}$	-	-	-0.85	V	$I_c/I_B = -10mA / -0.25mA$
	$V_{BE(sat)2}$	-	-	-1.05	V	$I_c/I_B = -50mA / -1.25mA$
Base-emitter voltage	$V_{BE(on)}$	-0.6	-	-0.75	V	$V_{CE} = -5V, I_c = -2mA$
DC current transfer ratio	$h_{FE}$	140	-	310	-	$V_{CE} = -5V, I_c = -2mA$
		80	-	-	-	$V_{CE} = -5V, I_c = -50mA$
Transition frequency	$f_T$	-	180	-	MHz	$V_{CE} = -5V, I_E = -10mA, f = 100MHz$
Collector output capacitance	$C_{ob}$	-	-	6	pF	$V_{CB} = -10V, f = 1MHz$
Noise figure	NF	-	-	6	dB	$V_{CE} = -5V, I_c = -200\mu A, f = 1kHz, R_g = 2k\Omega$
Collector-base cutoff current	$I_{CBO}$	-	-	-20	$\mu A$	$V_{CB} = -45V, T_a = 150^\circ C$

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