

#### **Features**

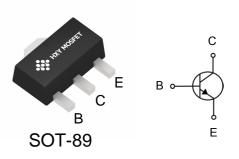
Collector Current: I<sub>C</sub>= 1A

Power Dissipation of 500mW

### **Package Marking and Ordering Information**

Product ID	Pack	Marking	Qty(PCS)
BCX54,BCX55, BCX56	SOT-89	BCX5x	1000

x:From 4,4-10,4-16 5,5-10,5-16 6,6-10,6-16



#### Maximum Ratings (Ta=25 unless otherwise noted)

Symbl	Parameter	Value	Unit	
		BCX54	45	
Vсво	Collector-Base Voltage	BCX55	60	V
		BCX56	100	
		BCX54	45	V
VCEO	Collector-Emitter Voltage	BCX55	60	V
		BCX56	80	V
Vево	Emitter-Base Voltage		5	V
Ic	Collector Current-Continuous		1	Α
Pc	Collector Power Dissipation		500	mW
Tj	Junction Temperature		150	$^{\circ}$
T <sub>stg</sub>	Storage Temperature		-55-150	$^{\circ}$



# Electrical Characteristics (Ta=25 unless otherwise specified)

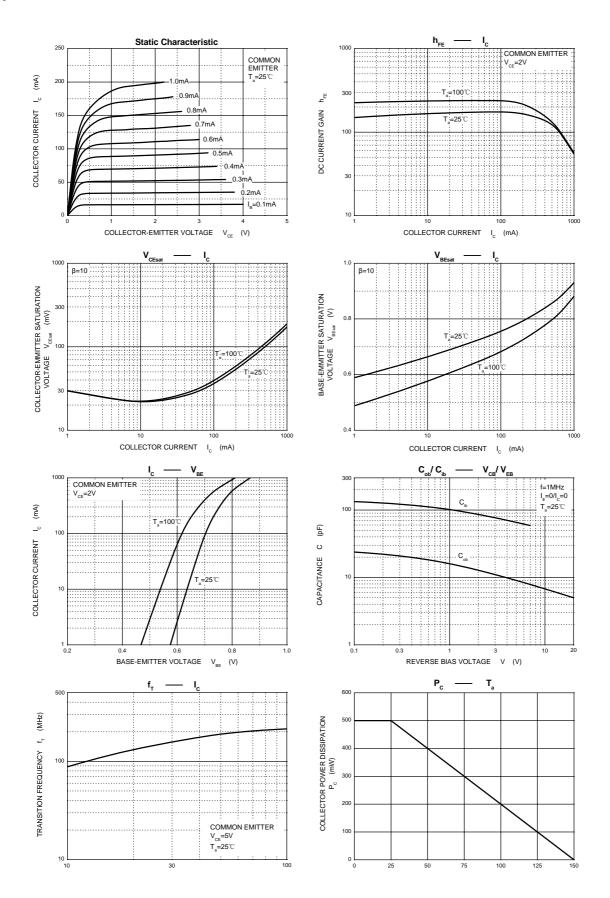
Parameter	Symbol	Test conditions		Min	Тур	Max	Unit
			BCX54	45			
Collector-base breakdown voltage	$V_{(BR)CBO}$	I <sub>C</sub> =100μA,I <sub>E</sub> =0	BCX55	60			V
			BCX56	100			
			BCX54	45			
Collector-emitter breakdown voltage	V <sub>(BR)CEO*</sub>	$I_C=10$ mA, $I_B=0$	BCX55	60			V
			BCX56	80			
Emitter-base breakdown voltage	V <sub>(BR)EBO</sub>	I <sub>E</sub> =10μΑ,I <sub>C</sub> =0		5			V
Collector cut-off current	I <sub>CBO</sub>	V <sub>CB</sub> =30V,I <sub>E</sub> =0				0.1	μA
Emitter cut-off current	I <sub>EBO</sub>	V <sub>EB</sub> =5V,I <sub>C</sub> =0				0.1	μA
	h <sub>FE(1)*</sub>	V <sub>CE</sub> =2V, I <sub>C</sub> =5mA		40			
DC current gain	h <sub>FE(2)*</sub>	V <sub>CE</sub> =2V, I <sub>C</sub> =150mA		63		250	
	h <sub>FE(3)*</sub>	V <sub>CE</sub> =2V, I <sub>C</sub> =0.5A		25			
Collector-emitter saturation voltage	V <sub>CE(sat)*</sub>	I <sub>C</sub> =0.5A,I <sub>B</sub> =50mA				0.5	V
Base -emitter voltage	V <sub>BE*</sub>	V <sub>CE</sub> =2V, I <sub>C</sub> =0.5A				1	V
Transition frequency	f <sub>T</sub>	VcE=5V,Ic=10mA, f=100MHz			130		MHz

## Classifiction Of hFE

Rank	BCX54,BCX55	BCX54-10,BCX55-10	BCX54-16,BCX55-16	
	BCX56	BCX56-10	BCX56-16	
Range	63-250	63-160	100-250	

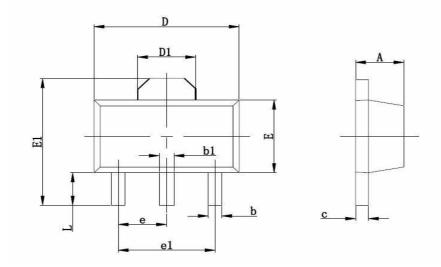


## **Typical Characteristics**





# **SOT-89 Package Outline Dimensions**



Symbol	Dimensions	In Millimeters	Dimensions In Inches		
	Min	Max	Min	Max	
Α	1.400	1.600	0.055	0.063	
b	0.320	0.520	0.013	0.020	
b1	0.400	0.580	0.016	0.023	
С	0.350	0.440	0.014	0.017	
D	4.400	4.600	0.173	0.181	
D1	1.550 REF.		0.061 REF.		
E	2.300	2.600	0.091	0.102	
E1	3.940	4.250	0.155	0.167	
е	1.500 TYP.		0.060 TYP.		
e1	3.000 TYP.		0.118 TYP.		
L	0.900	1.200	0.035	0.047	



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