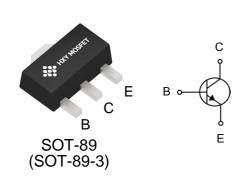


#### **Features**

- Collector Current: I<sub>C</sub>= 1A
- Power Dissipation of 500mW

## **Package Marking and Ordering Information**

Product ID	Pack	Marking	Qty(PCS)
HBCX56TX	SOT-89 (SOT-89-3)	BL	1000



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

Symbl	Parameter	Value	Unit
Vсво	Collector-Base Voltage	100	V
VCEO	Collector-Emitter Voltage	80	V
VEBO	Emitter-Base Voltage	5	V
I <sub>C</sub>	Collector Current-Continuous	1	Α
Pc	Collector Power Dissipation	500	mW
T <sub>j</sub>	Junction Temperature	150	°C
T <sub>stg</sub>	Storage Temperature	-55-150	°C

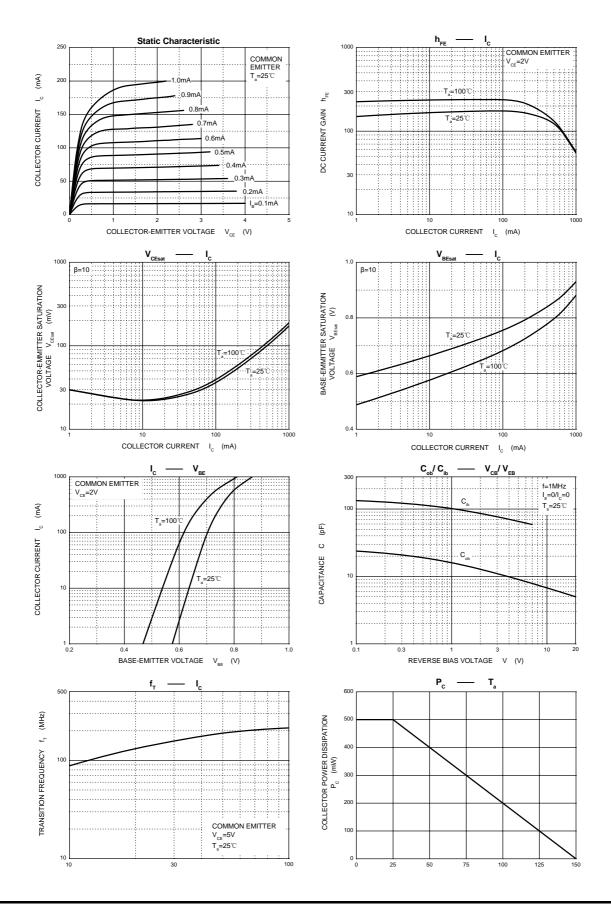


# Electrical Characteristics (Ta=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Тур	Max	Unit
Collector-base breakdown voltage	V <sub>(BR)CBO</sub>	I <sub>C</sub> =100μΑ,I <sub>E</sub> =0	100			V
Collector-emitter breakdown voltage	V <sub>(BR)CEO*</sub>	I <sub>C</sub> =10mA,I <sub>B</sub> =0	80			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	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	100		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,lc=10mA, f=100MHz		130		MHz

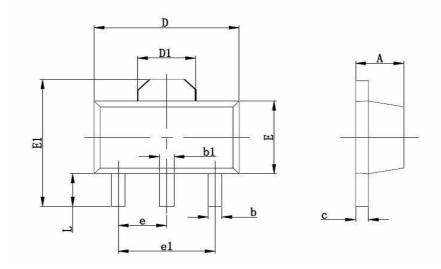


## **Typical Characteristics**





# SOT-89(SOT-89-3) 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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