

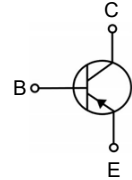
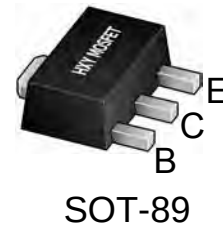


Features

- Collector Current: $I_C = 1A$
- Power Dissipation of 500mw

Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
BCX53-16,115	SOT-89	AL	1000



Maximum Ratings ($T_a = 25^\circ C$ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-100	V
V_{CEO}	Collector-Emitter Voltage	-80	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current-Continuous	-1	A
P_C	Collector Power Dissipation	500	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	250	$^\circ C/W$
T_{stg}	Storage Temperature	-55-150	$^\circ C$

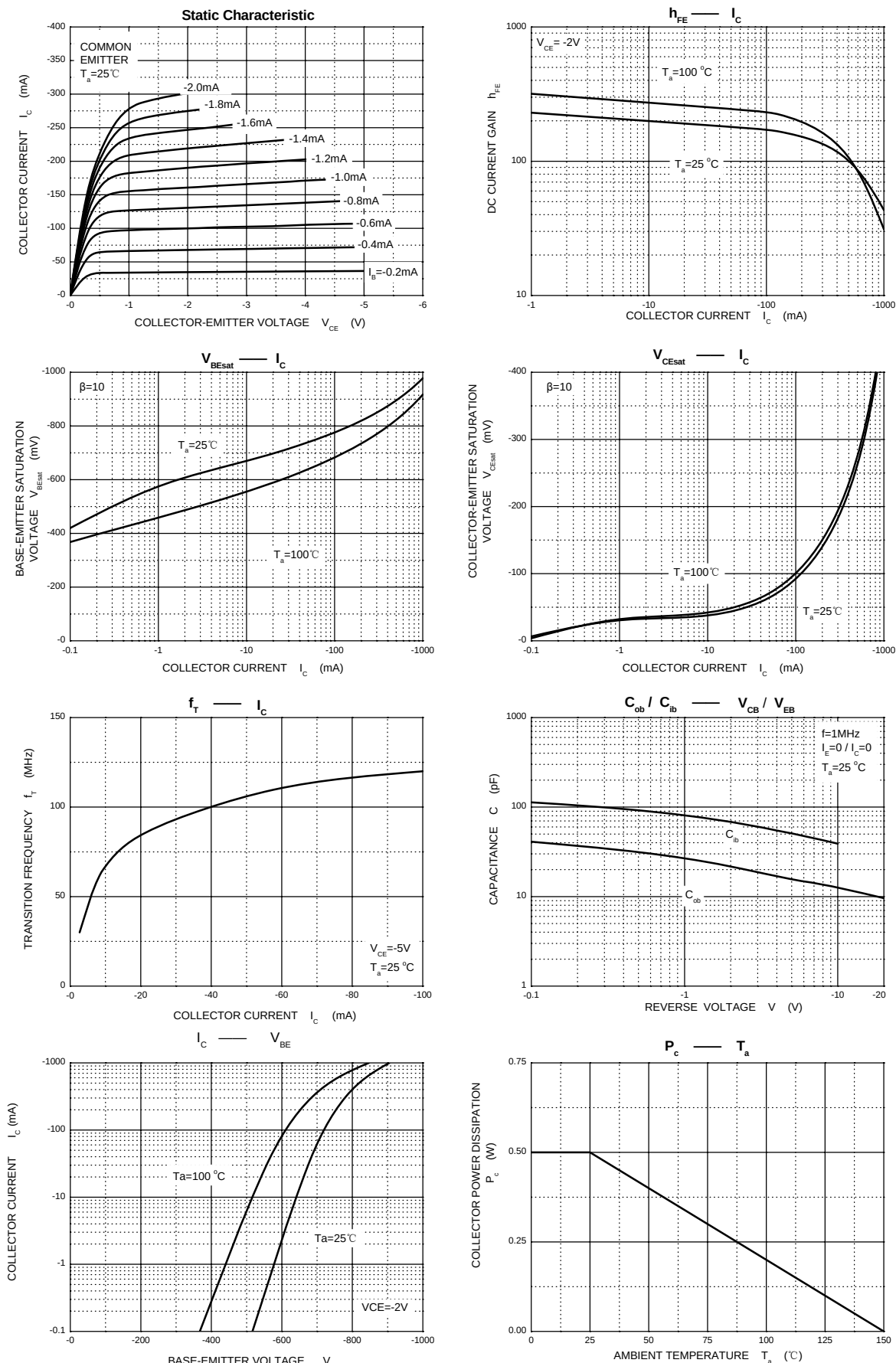
Electrical Characteristics ($T_a = 25^\circ C$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -100\mu A, I_E = 0$	-100			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}^*$	$I_C = -10mA, I_B = 0$	-80			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -100\mu A, I_C = 0$	-5			V
Collector cut-off current	I_{CBO}	$V_{CB} = -30V, I_E = 0$			-0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -5V, I_C = 0$			-0.1	μA
DC current gain	$h_{FE(1)}^*$	$V_{CE} = -2V, I_C = -5mA$	63			
	$h_{FE(2)}^*$	$V_{CE} = -2V, I_C = -150mA$	100		250	
	$h_{FE(3)}^*$	$V_{CE} = -2V, I_C = -0.5A$	40			
Collector-emitter saturation voltage	$V_{CE(sat)}^*$	$I_C = -0.5A, I_B = -50mA$			-0.5	V
Base-emitter voltage	V_{BE}^*	$V_{CE} = -2V, I_C = -0.5A$			-1	V
Transition frequency	f_T	$V_{CE} = -5V, I_C = -10mA, f = 100MHz$		50		MHz

* Pulse Test

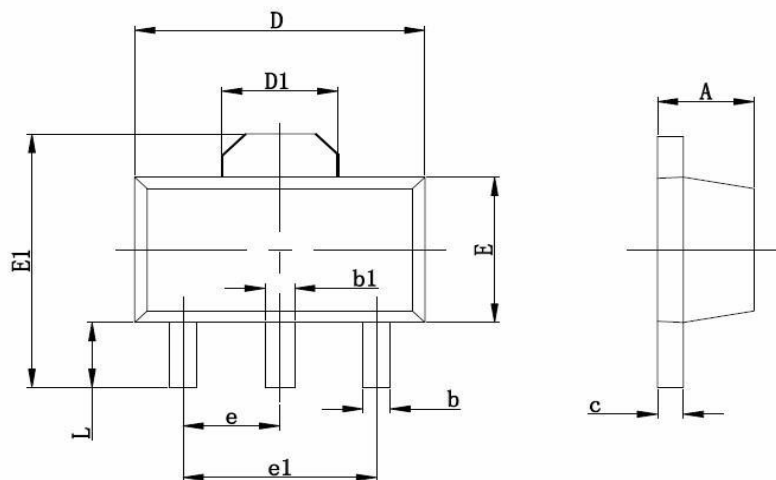


Typical Characteristics





SOT-89 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	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
c	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
e	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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