

Features

- NPN Complements to BCX56
- Low Voltage
- High Current



SOT-89-3L

Absolute Maximum Ratings($T_A=25^{\circ}\text{C}$)

Symbol	Parameter	Value	Unit
V_{CB0}	Collector-Base Voltage	-100	V
V_{CE0}	Collector-Emitter Voltage	-80	V
V_{EB0}	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	$^{\circ}\text{C}/\text{W}$
T_J, T_{stg}	Operation Junction And Storage Temperature Range	-55 ~ +150	$^{\circ}\text{C}$

Electrical Characteristics ($T_A=25^{\circ}\text{C}$ unless otherwise specified)

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

Ordering information

Product ID	Pack	Naming rule	Marking	$h_{FE(1)}$	Qty(PCS)
BCX53-16	SOT-89-3L	BCX53-16 ↓ 产品名称 product name	AL	100-250	1000



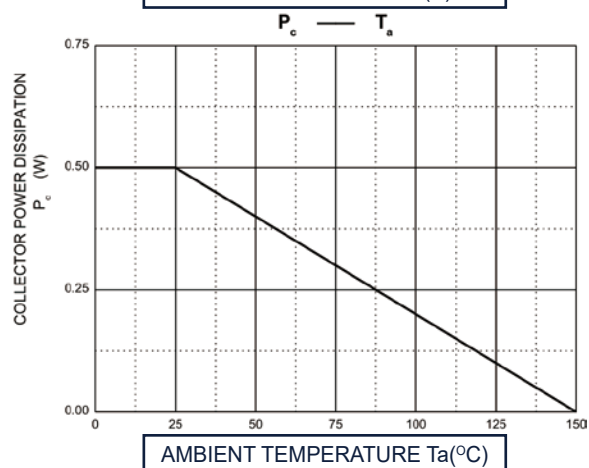
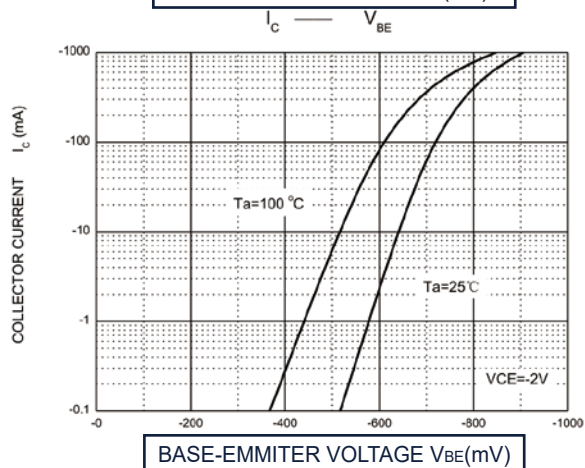
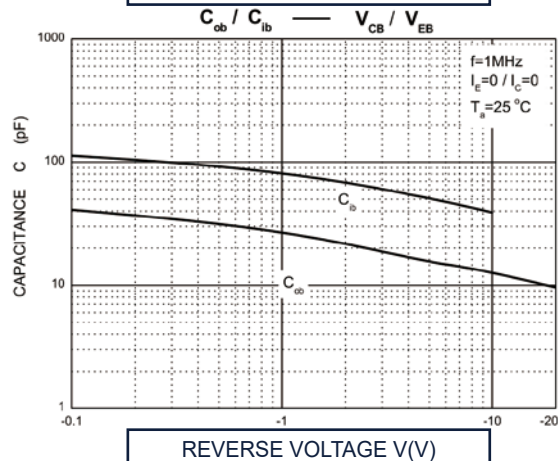
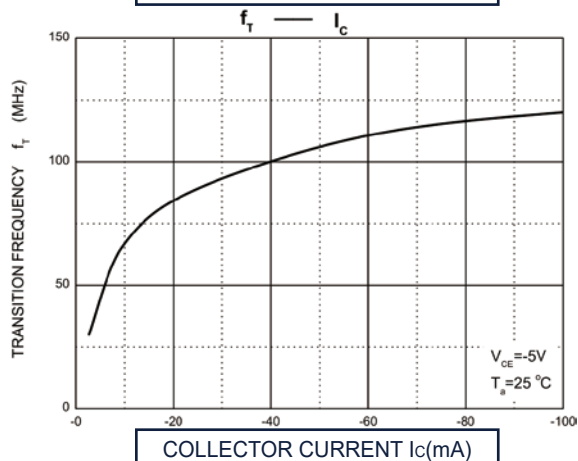
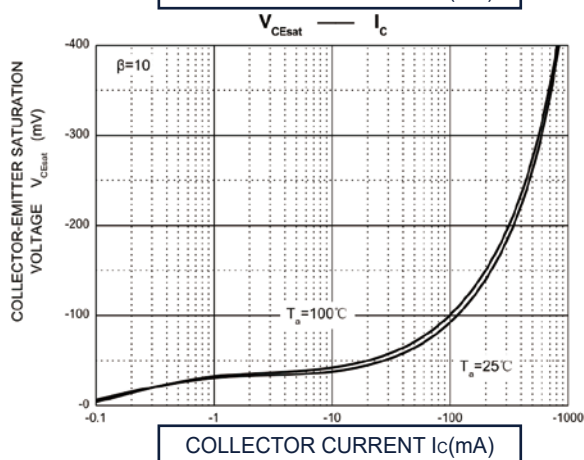
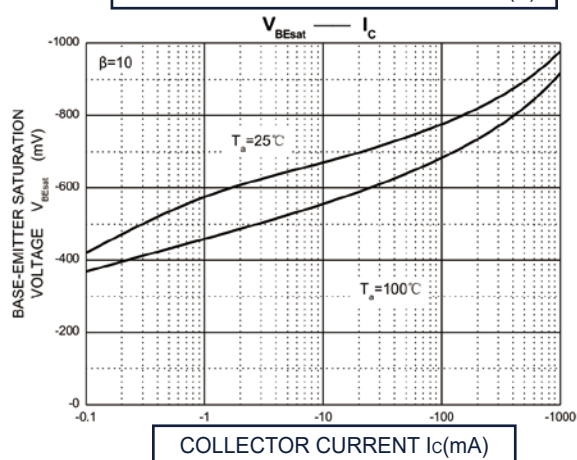
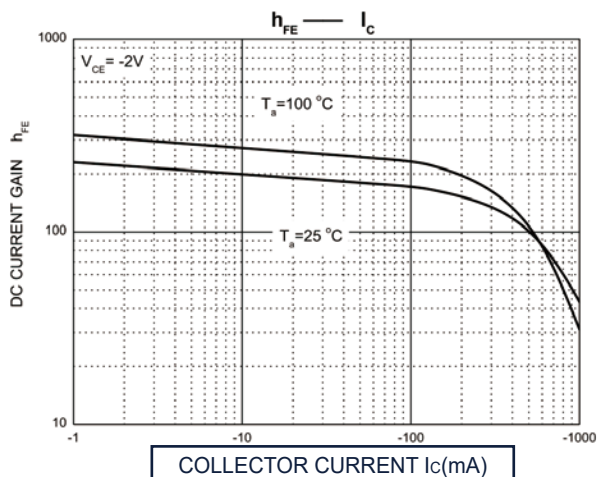
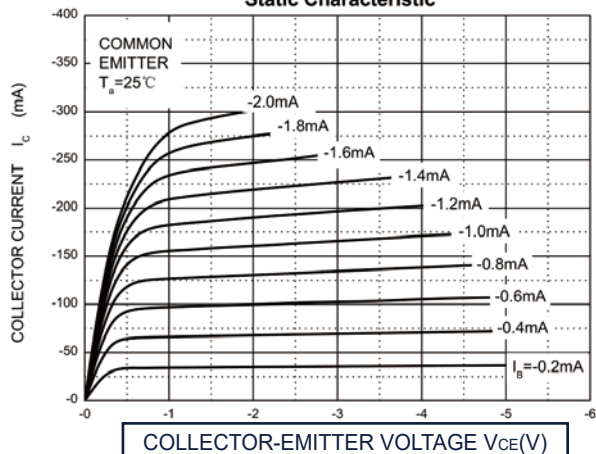
TWTLSEMI

TL-BCX53-16

SOT-89-3L Plastic-Encapsulate Transistors (PNP)

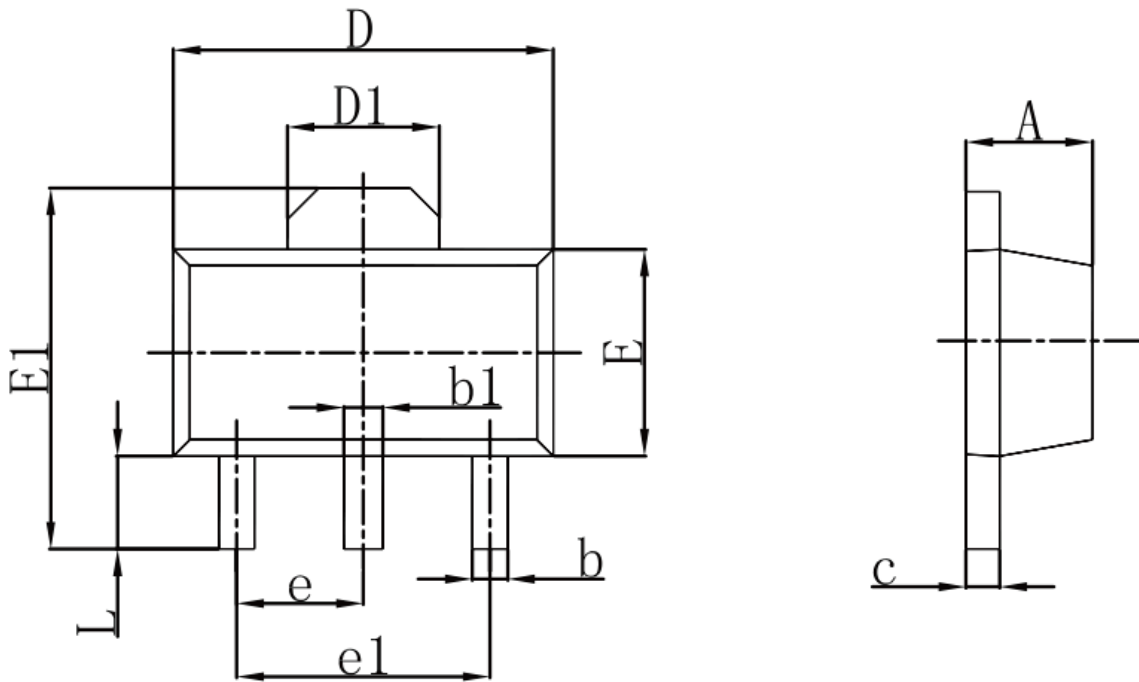
Typical Characteristics

Static Characteristic





SOT-89-3L 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