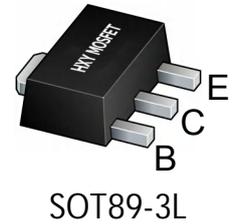




FEATURES

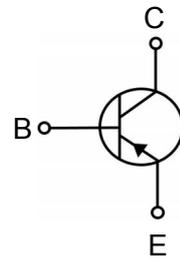
- Collector Current: $I_C = -1A$
- Power Dissipation of 1.5w



SOT89-3L

Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
BCP51	SOT89-3L	BCP51	1000
BCP52	SOT89-3L	BCP52	1000
BCP53	SOT89-3L	BCP53	1000



MAXIMUM RATINGS (Ta=25 unless otherwise noted)

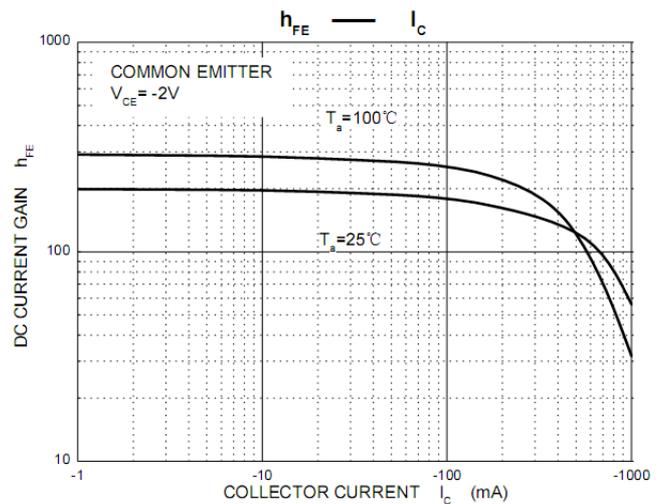
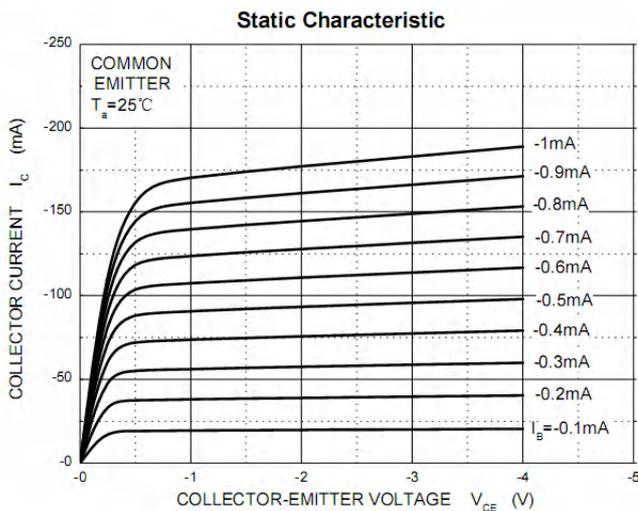
Parameter	Symbol	Limit	Unit
Collector-Base Voltage	BCP51	-45	V
	BCP52	-60	
	BCP53	-100	
Collector-Emitter Voltage	BCP51	-45	V
	BCP52	-60	
	BCP53	-80	
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current	I_C	-1	A
Collector Power Dissipation	P_C	1.5	W
Thermal Resistance From Junction To Ambient	$R_{\theta JA}$	94	$^{\circ}C/W$
Junction Temperature	T_j	150	$^{\circ}C$
Storage Temperature	T_{stg}	-55~+150	$^{\circ}C$

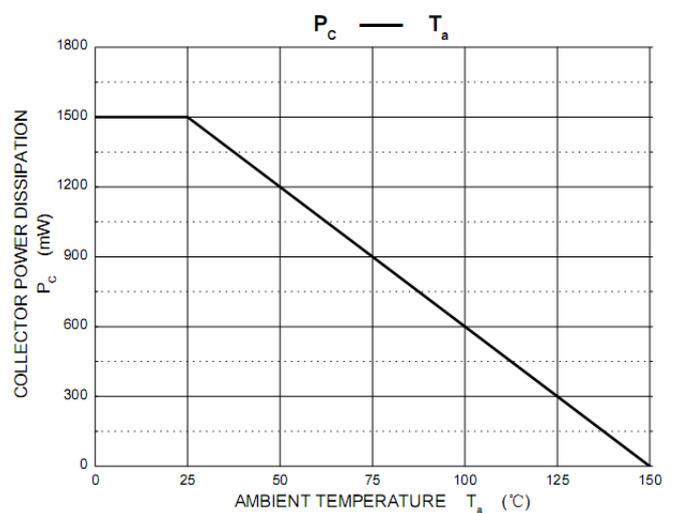
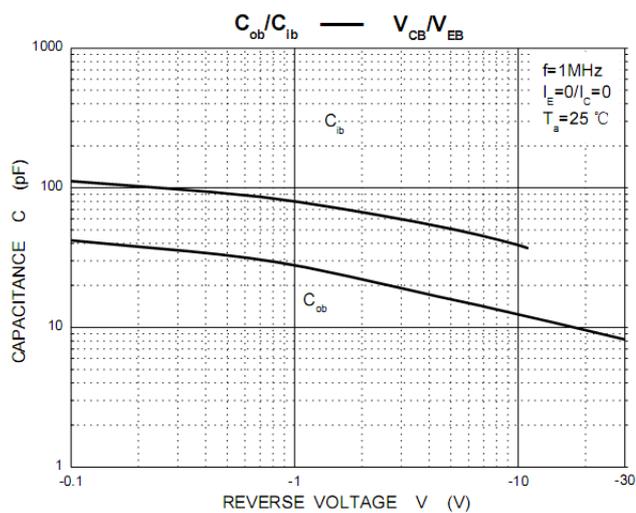
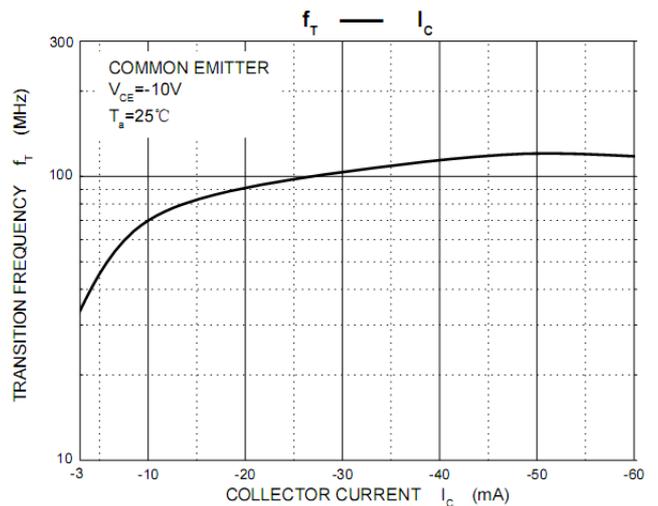
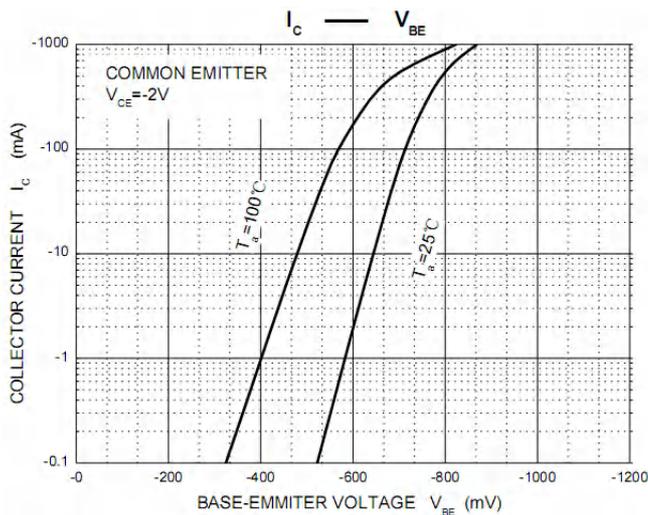
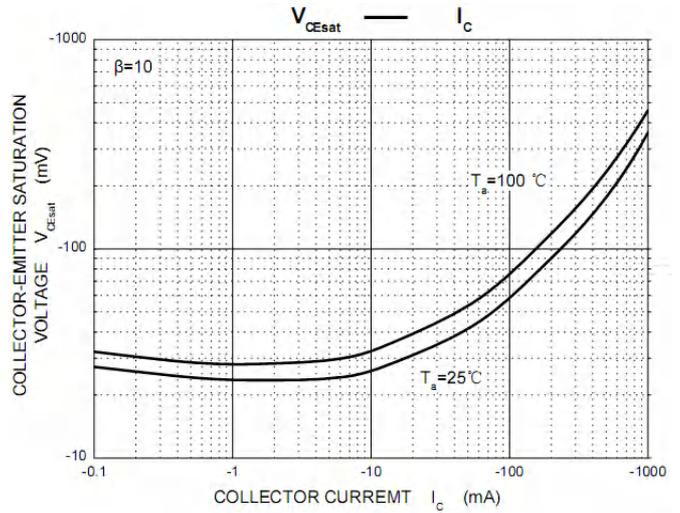
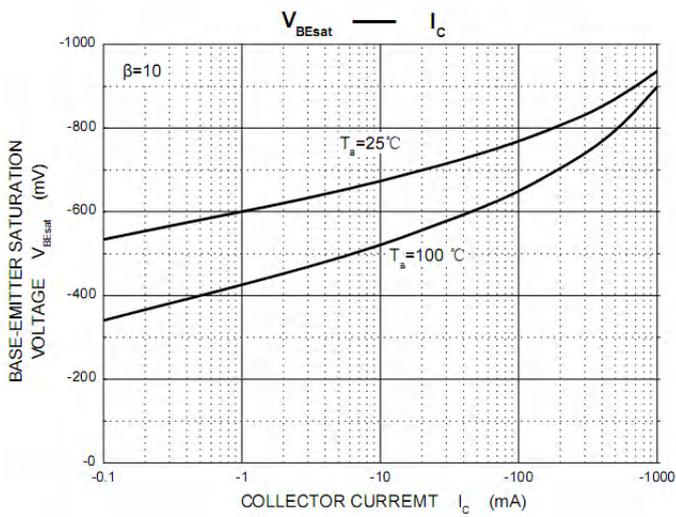


ELECTRICAL CHARACTERISTICS $T_a=25^\circ\text{C}$ unless otherwise specified

Parameter	Symbol	Test conditions	Min	Max	Unit
Collector-base breakdown voltage	BCP51	$I_C = -0.1\text{mA}, I_E = 0$	-45		V
	BCP52		-60		
	BCP53		-100		
Collector-emitter breakdown voltage	BCP51	$I_C = -10\text{mA}, I_B = 0$	-45		V
	BCP52		-60		
	BCP53		-80		
Base-emitter breakdown voltage	$V_{(BR)EBO}$	$I_E = -10\mu\text{A}, I_C = 0$	-5		V
Collector cut-off current	I_{CBO}	$V_{CB} = -30\text{V}, I_E = 0$		-100	nA
DC current gain	$h_{FE(1)}$	$V_{CE} = -2\text{V}, I_C = -5\text{mA}$	25		
	$h_{FE(2)}$	$V_{CE} = -2\text{V}, I_C = -150\text{mA}$	63	250	
	$h_{FE(3)}$	$V_{CE} = -2\text{V}, I_C = -500\text{mA}$	25		
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -500\text{mA}, I_B = -50\text{mA}$		-0.5	V
Base-emitter voltage	V_{BE}	$V_{CE} = -2\text{V}, I_C = -500\text{mA}$		-1	V
Transition frequency	f_T	$V_{CE} = -10\text{V}, I_C = -50\text{mA}, f = 100\text{MHz}$	100		MHz

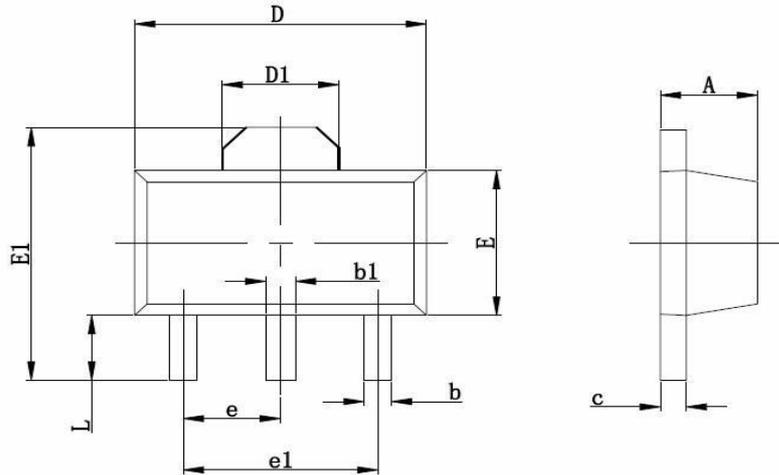
Typical Characteristics







SOT89-3L 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



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