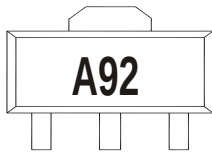
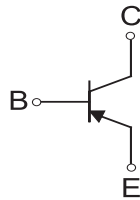
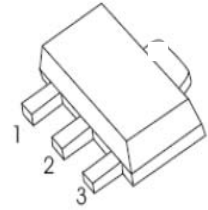


SOT-89-3L Plastic-Encapsulate Transistors**A92**

TRANSISTOR (PNP)

FEATURES

- Low Collector-Emitter Saturation Voltage
- High Breakdown Voltage

MARKING**Equivalent Circuit****SOT-89-3L**

1. BASE

2. COLLECTOR

3. EMITTER

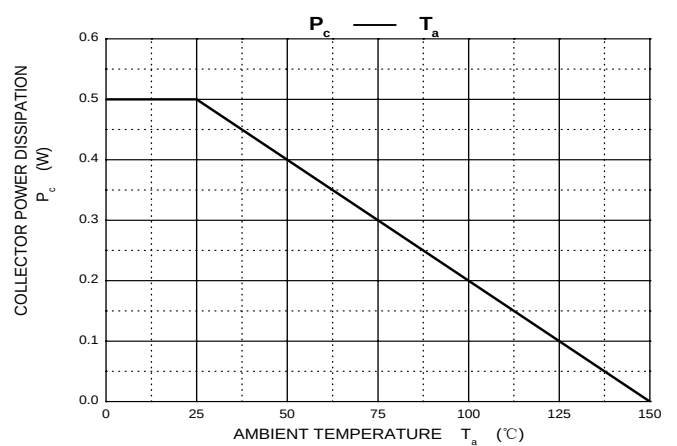
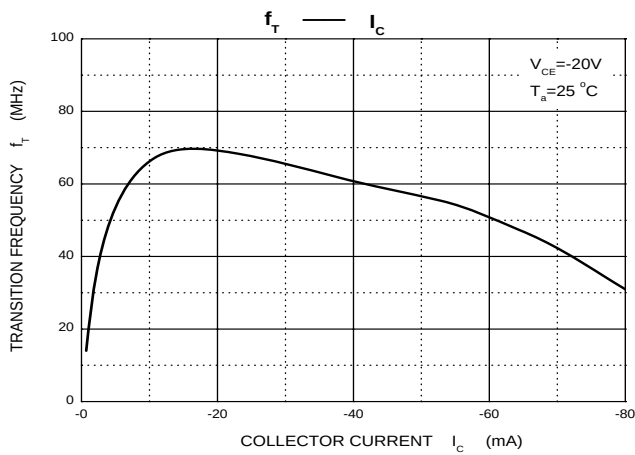
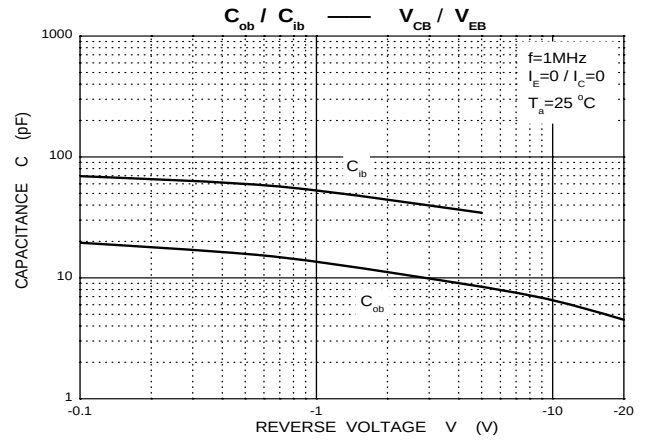
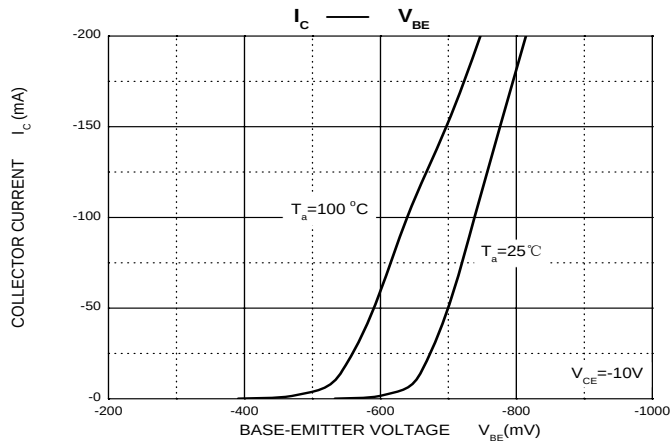
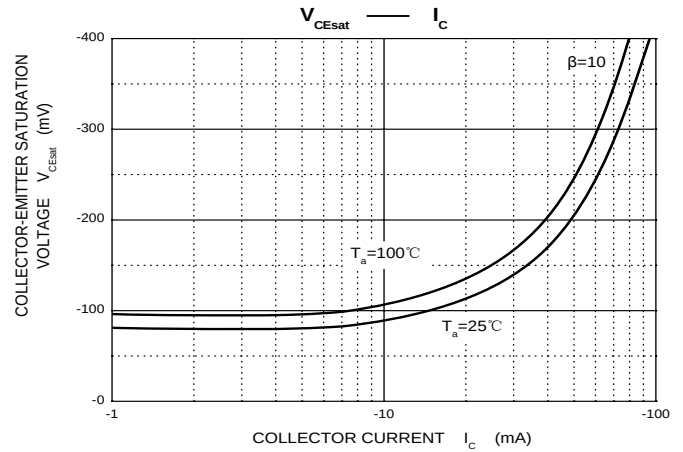
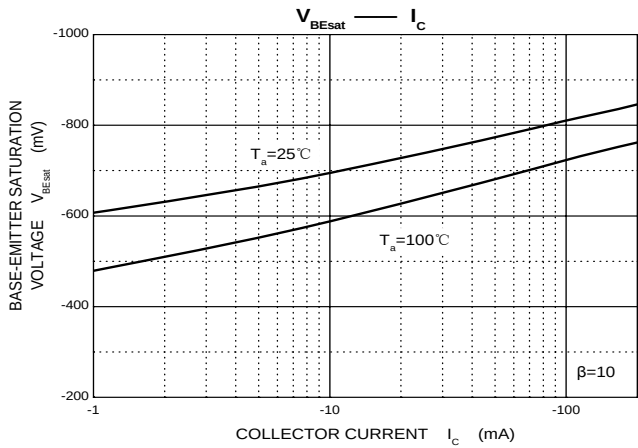
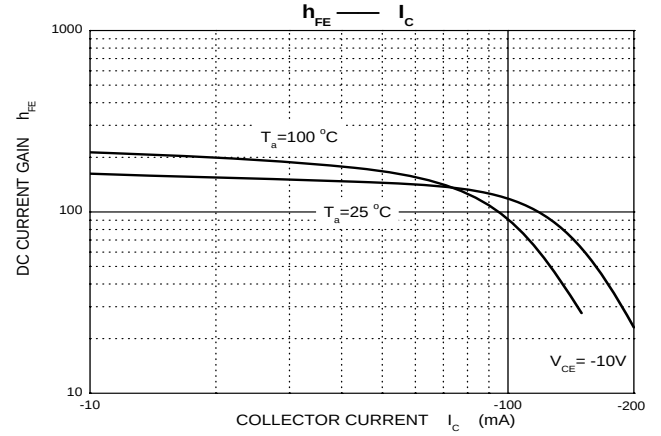
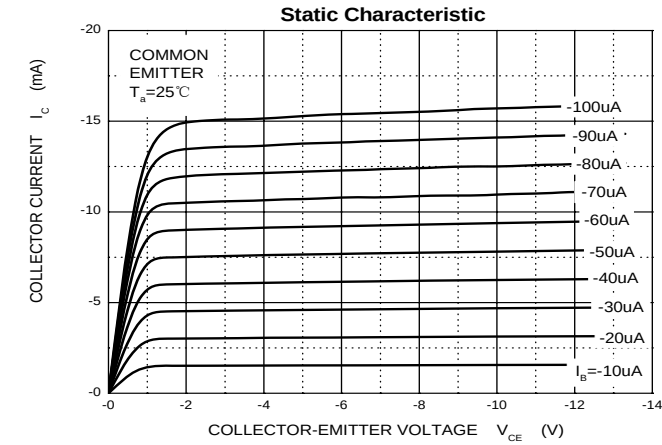
MAXIMUM RATINGS ($T = 25^{\circ}\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-310	V
V_{CEO}	Collector-Emitter Voltage	-305	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current- Continuous	-200	mA
I_{CM}	Collector Current -Pulsed	-500	mA
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	$^{\circ}\text{C}$

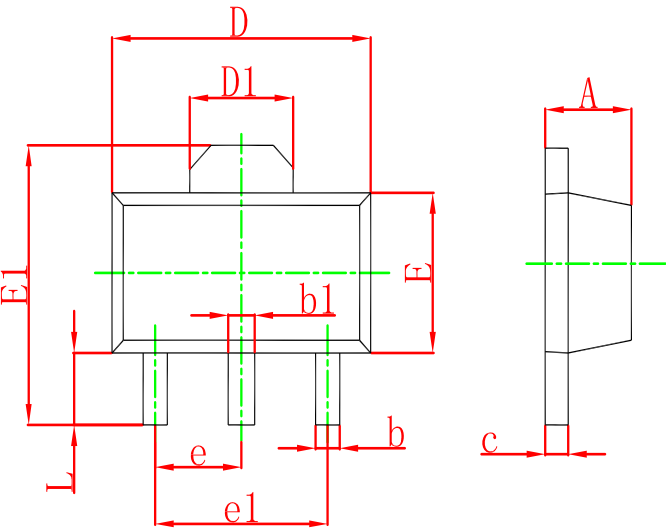
ELECTRICAL CHARACTERISTICS ($T_a = 25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -100\mu\text{A}, I_E = 0$	-310			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -1\text{mA}, I_B = 0$	-305			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -100\mu\text{A}, I_C = 0$	-5			V
Collector cut-off current	I_{CBO}	$V_{CB} = -200\text{V}, I_E = 0$			-0.25	μA
	I_{CEO}	$V_{CE} = -200\text{V}, I_B = 0$			-0.25	μA
		$V_{CE} = -300\text{V}, I_B = 0$			-5	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -5\text{V}, I_C = 0$			-0.1	μA
DC current gain	$h_{FE(1)}$	$V_{CE} = -10\text{V}, I_C = -1\text{mA}$	60			
	$h_{FE(2)}$	$V_{CE} = -10\text{V}, I_C = -10\text{mA}$	100		300	
	$h_{FE(3)}$	$V_{CE} = -10\text{V}, I_C = -80\text{mA}$	60			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -20\text{mA}, I_B = -2\text{mA}$			-0.2	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -20\text{mA}, I_B = -2\text{mA}$			-0.9	V
Transition frequency	f_T	$V_{CE} = -20\text{V}, I_C = -10\text{mA}, f = 30\text{MHz}$				MHz

Typical Characteristics

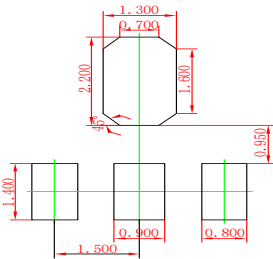


Package Outline Dimensions (SOT-89-3L)



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

Suggested Pad Layout (SOT-89-3L)



Note:
1.Controlling dimension:in millimeters.
2.General tolerance:±0.05mm.
3.The pad layout is for reference purposes only.