



Plastic-Encapsulate Transistors(N+P)

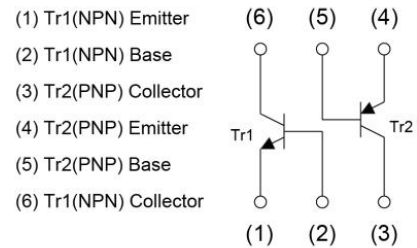
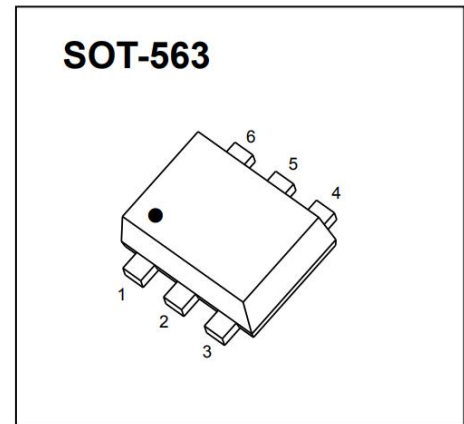
FEATURES

- 1)Both a 2SA2018 chip and 2SC5585 chip in a EMT package.
- 2)Mounting possible with EMT3 automatic mounting machines.
- 3)Transistor elements are independent, eliminating interference.
- 4)Mounting cost and area can be cut in half.
- 5)Low $V_{CE(sat)}$

MARKING:BX

MAXIMUM RATINGS TR1 (Ta=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector- Base Voltage	15	V
V_{CEO}	Collector-Emitter Voltage	12	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current -Continuous	0.5	A
P_C	Collector Power Dissipation	0.15	W
T_J	Junction Temperature	150	°C
T_{stg}	Storage Temperature	-55-150	°C



CHARACTERISTICS of TR1 (NPN Transistor) (Ta=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=10\mu A, I_E=0$	15			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=1mA, I_B=0$	12			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=10\mu A, I_C=0$	6			V
Collector cut-off current	I_{CBO}	$V_{CB}=15V, I_E=0$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=6V, I_C=0$			0.1	μA
DC current gain	h_{FE}	$V_{CE}=2V, I_C=10mA$	270		680	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=200mA, I_B=10mA$			0.25	V
Transition frequency	f_T	$V_{CE}=2V, I_C=10mA, f=100MHz$		320		MHz
Collector output capacitance	C_{ob}	$V_{CB}=10V, I_E=0, f=1MHz$		7.5		pF

MAXIMUM RATINGS TR2 (Ta=25°C unless otherwise noted)

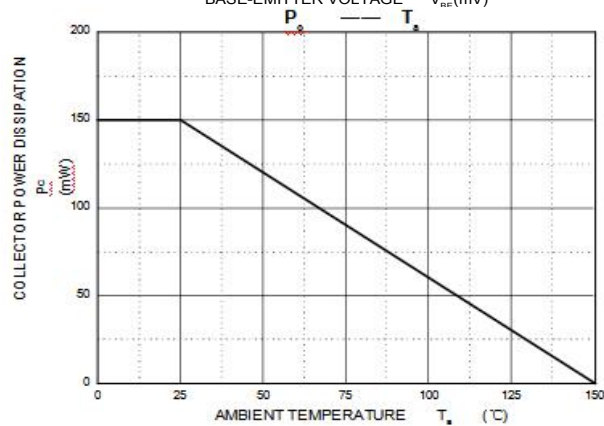
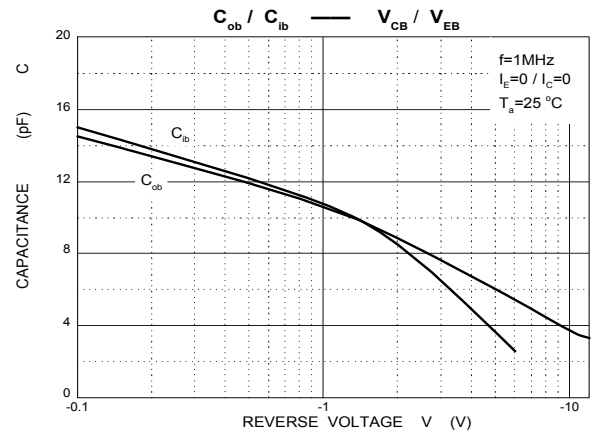
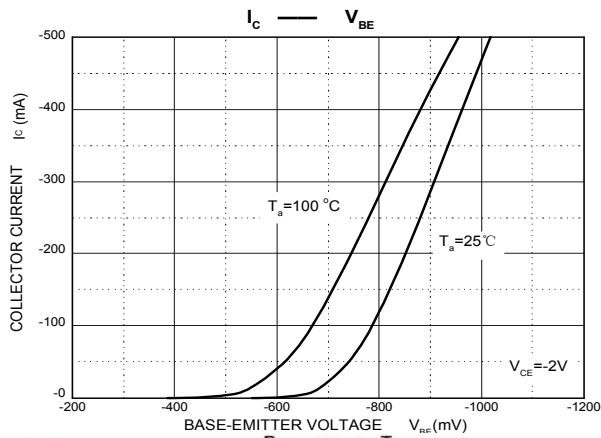
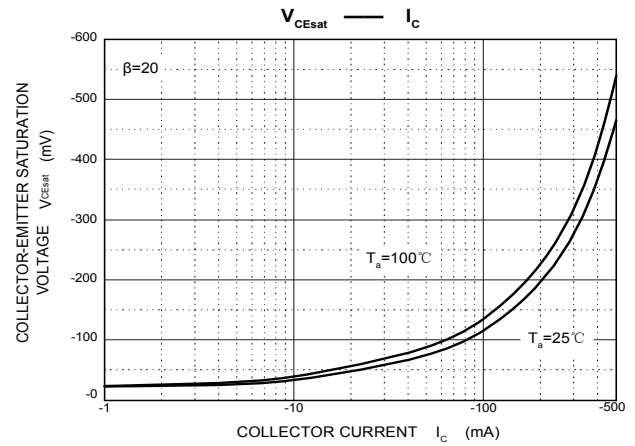
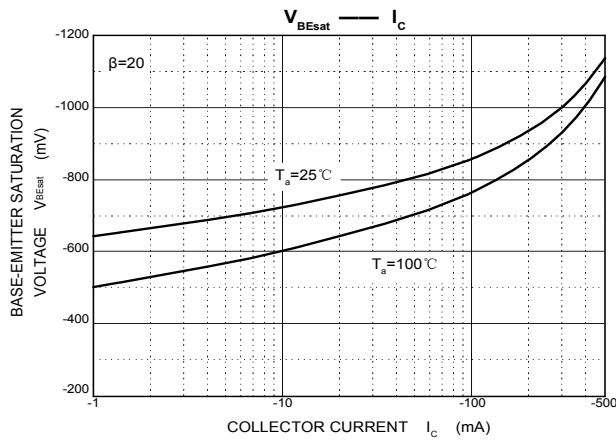
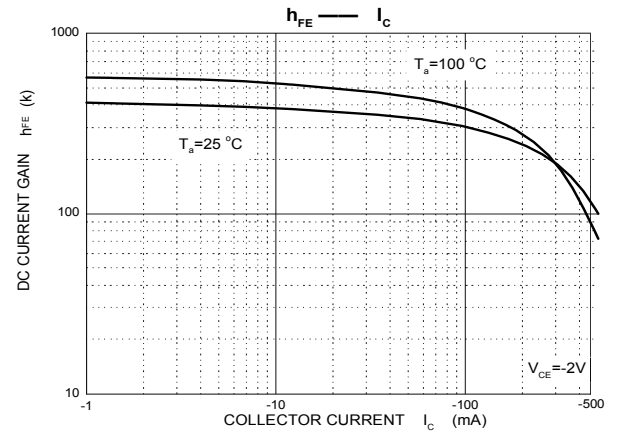
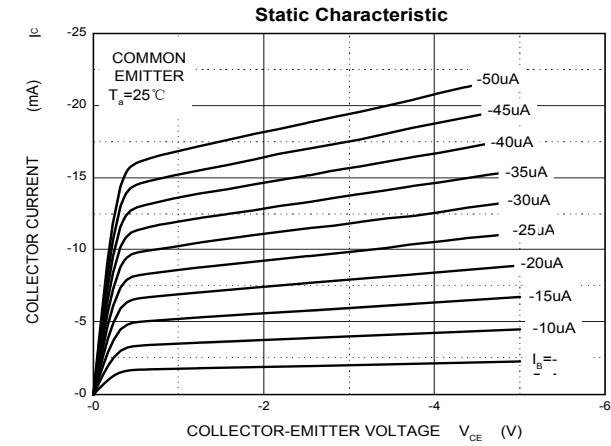
Symbol	Parameter	Value	Unit
V _{CBO}	Collector- Base Voltage	-15	V
V _{CEO}	Collector-Emitter Voltage	-12	V
V _{EBO}	Emitter-Base Voltage	-6	V
I _C	Collector Current -Continuous	-0.5	A
P _C	Collector Power Dissipation	0.15	W
T _J	Junction Temperature	150	°C
T _{stg}	Storage Temperature	-55-150	°C

CHARACTERISTICS of TR2 (PNP Transistor) (Ta=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V _{(BR)CBO}	I _C =-10μA, I _E =0	-15			V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C =-1mA, I _B =0	-12			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E =-10μA, I _C =0	-6			V
Collector cut-off current	I _{CBO}	V _{CB} = -15 V, I _E =0			-0.1	μA
Emitter cut-off current	I _{EBO}	V _{EB} =- 6V, I _C =0			-0.1	μA
DC current gain	h _{FE}	V _{CE} =-2V, I _C =-10mA	270		680	
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =-200mA, I _B =-10mA			-0.25	V
Transition frequency	f _T	V _{CE} =-2V, I _C =-10mA, f=100MHz		260		MHz
Collector output capacitance	C _{ob}	V _{CB} =-10V, I _E =0, f=1MHz		6.5		pF

Typical Characteristics

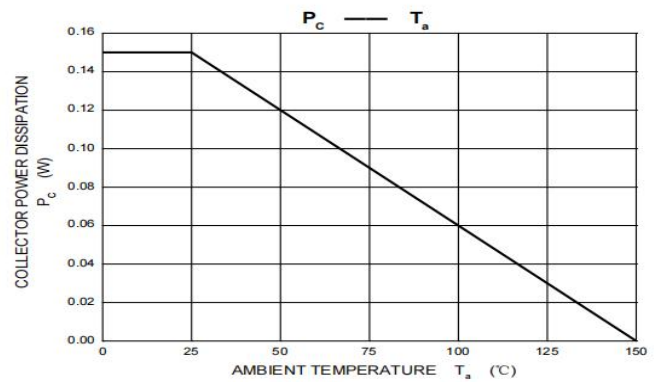
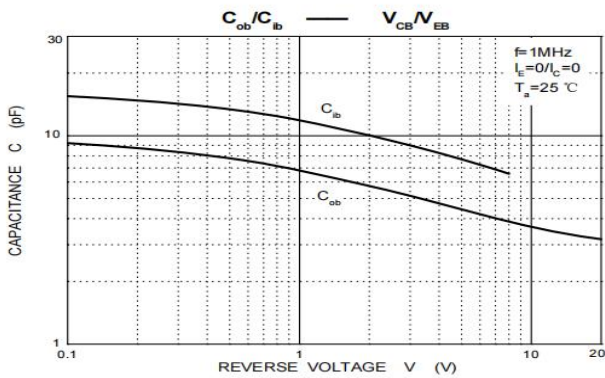
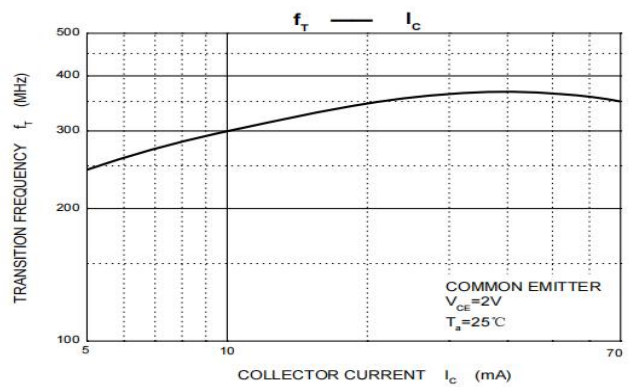
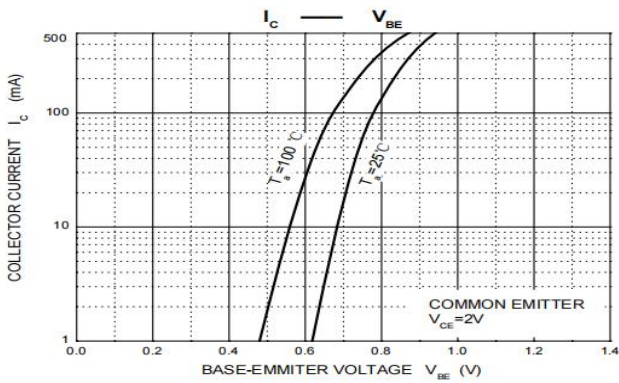
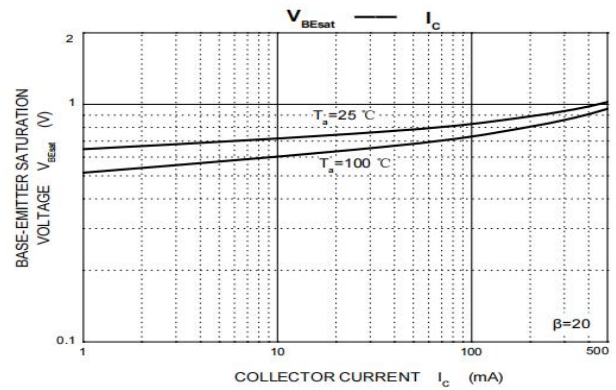
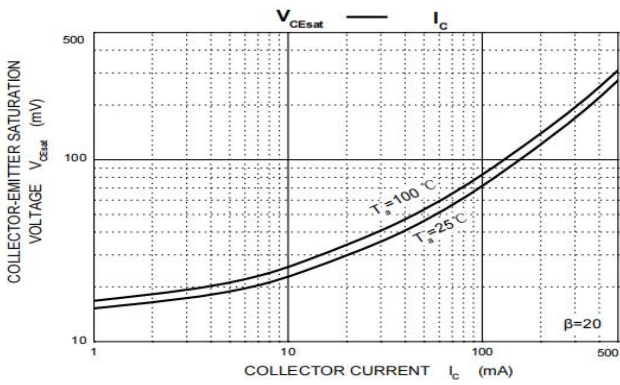
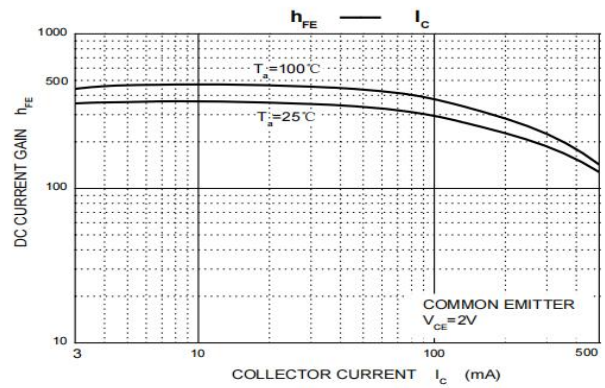
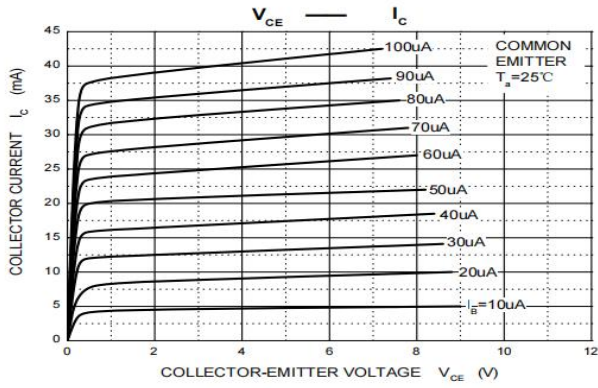
TR1





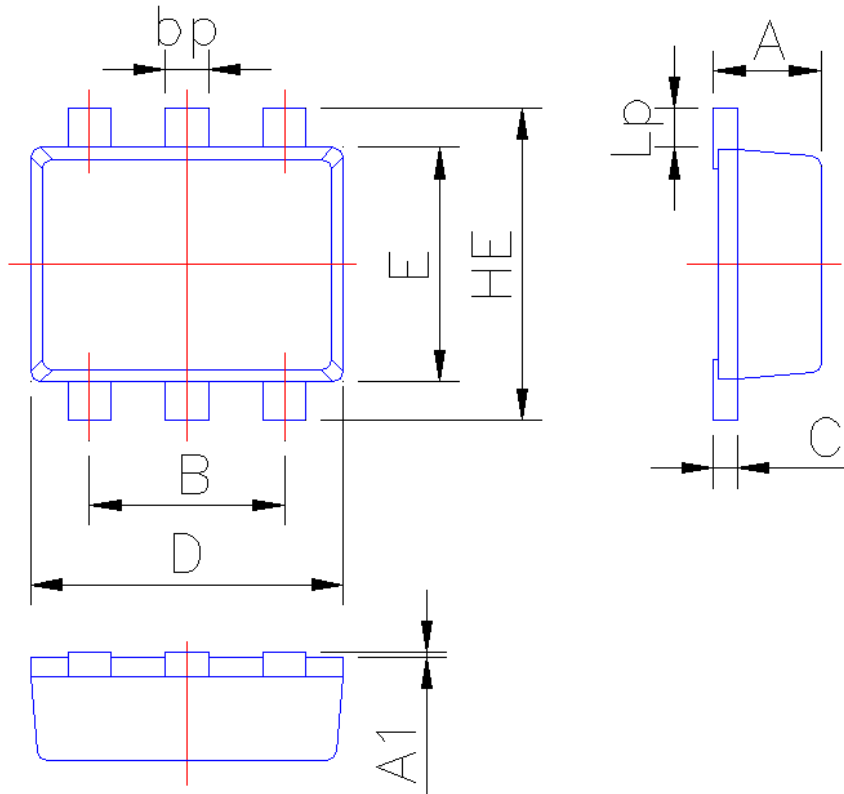
Typical Characteristics

TR2





SOT-563 Package Outline Dimensions



Symbol	Dimension in Millimeters	
	Min	Max
A	0.50	0.60
A1	0	0.05
B	0.95	1.05
bp	0.13	0.30
C	0.09	0.150
D	1.50	1.70
E	1.15	1.35
HE	1.40	1.80
Lp	0.13	0.30