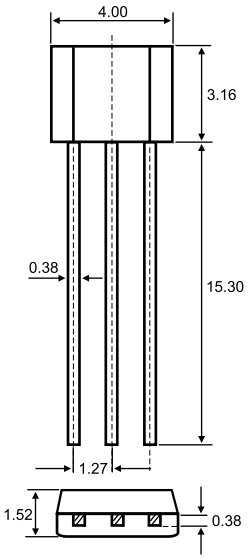
2SA1585S

TO-92S Bipolar Transistor (PNP)

1 2 3

1. EMITTER
2. COLLECTOR
3. BASE

TO-92S



Dimensions in inches and (millimeters)

Features

- ✧ Low $V_{CE(sat)}$.$V_{CE(sat)}$ = 0.2V (Typ.)(I_C/I_B = 2A/0.1A)
- ✧ Excellent DC current gain characteristics.
- ✧ Power dissipation

MAXIMUM RATINGS (T_A=25℃ unless otherwise noted)

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	-20	V
V_{CEO}	Collector-Emitter Voltage	-20	V
V_{EBO}	Emitter-Base Voltage	-6	V
I_C	Collector Current -Continuous	-2	A
P_C	Collector Power Dissipation	400	mW
T_j	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55-150	℃

ELECTRICAL CHARACTERISTICS (Tamb=25℃ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C= -50μA , I_E=0	-20			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C= -1mA , I_B=0	-20			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=- 50μA, I_C=0	-6			V
Collector cut-off current	I_{CBO}	V_{CB}=-20V , 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}	V_{CE}=-2V, I_C= -0.1A	120		560	
Collector-emitter saturation voltage	V_{CEsat}	I_C= -2A, I_B=-0.1A			-0.5	V
Transition frequency	f_T	V_{CE}=-2V, I_C=-0.5A F=100MHz	200			MHz

CLASSIFICATION OF h_{FE}

Rank	Q	R	s
Range	120-170	180-390	270-560

2SA1585S

TO-92S Bipolar Transistor (PNP)

Typical Characteristics

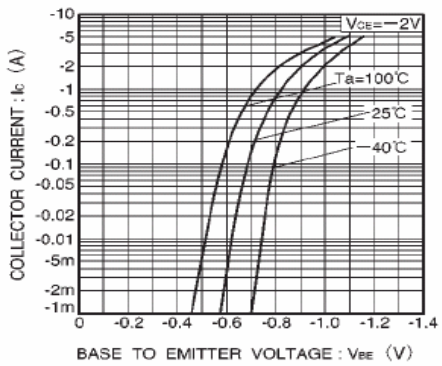


Fig.1 Grounded emitter propagation characteristics

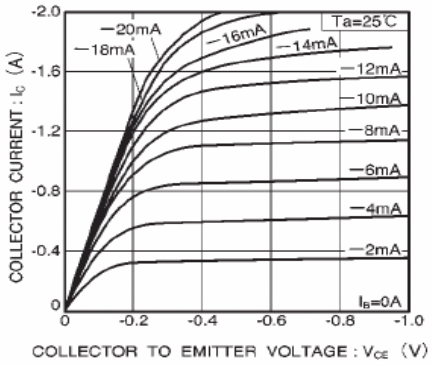


Fig.2 Grounded emitter output characteristics (Ⅰ)

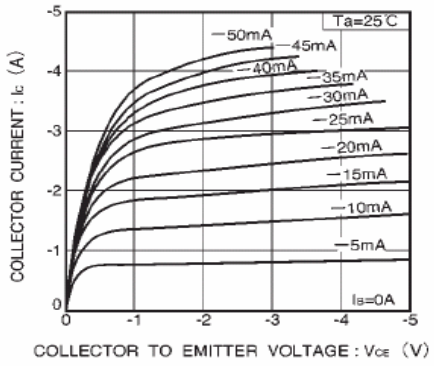


Fig.3 Grounded emitter output characteristics (Ⅱ)

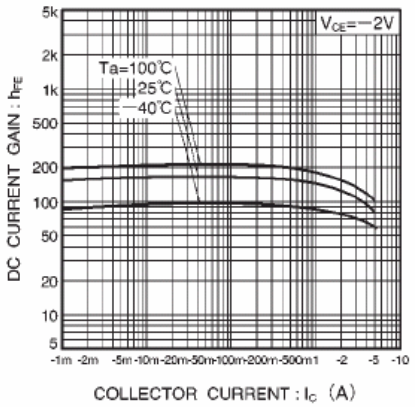


Fig.4 DC current gain vs. collector current

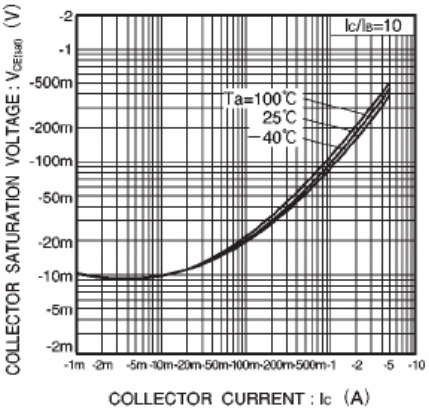


Fig.5 Collector-emitter saturation voltage vs. collector current (Ⅰ)

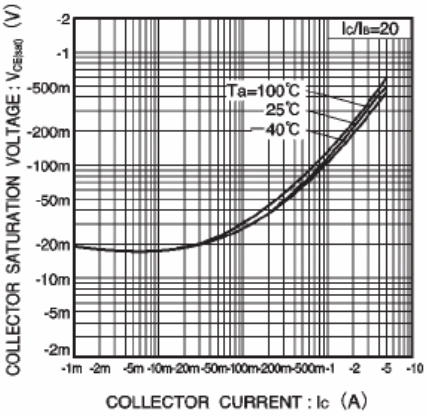


Fig.6 Collector-emitter saturation voltage vs. collector current (Ⅱ)

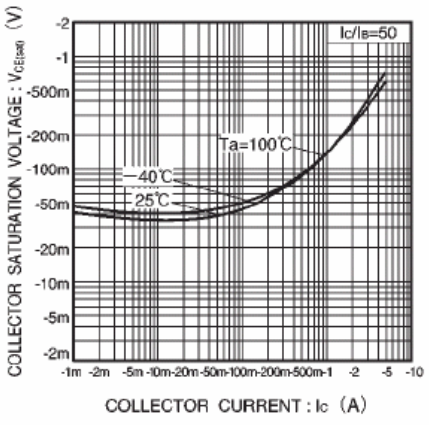


Fig.7 Collector-emitter saturation voltage vs. collector current (Ⅲ)

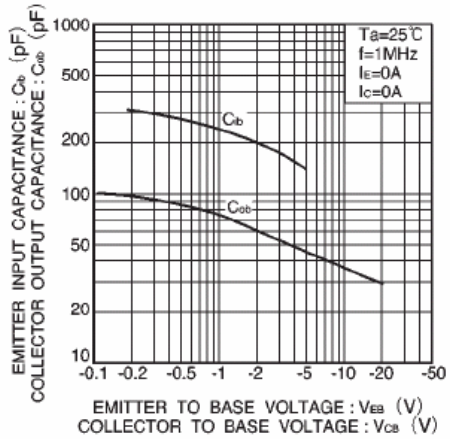


Fig.8 Gain bandwidth product vs. emitter current
Collector output capacitance vs. collector-base voltage

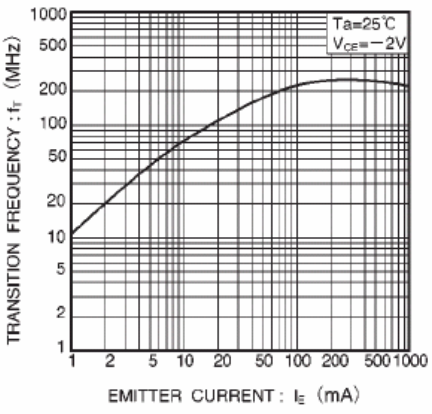


Fig.9 Emitter input capacitance vs. emitter base voltage

Package	Box	Box Size(mm)	Carton	Carton Size(mm)
TO-92S	3000pcs	333×162×43	30,000pcs	350×340×250