

TO-92 Plastic-Encapsulate Transistors

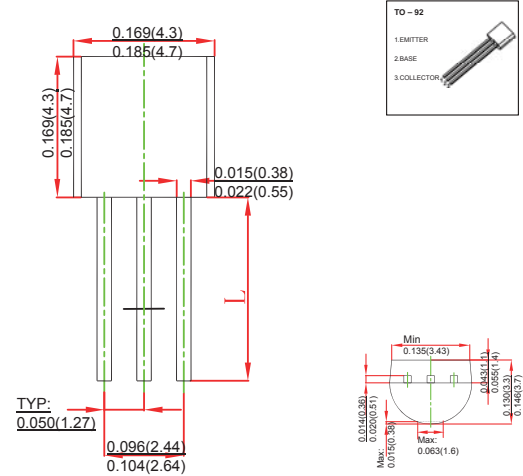
FEATURES

- Complimto S8550
- Colltcto cuttt: $I_C=0.5A$
- TRANSISTOR (NPN)

MECHANICAL DATA

- Case style: TO-92 molded plastic
- Mounting position: any

TO-92



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CB0}	Collector-Base Voltage	40	V
V_{CE0}	Collector-Emitter Voltage	25	V
V_{EB0}	Emitter-Base Voltage	5	V
I_C	Collector Current -Continuous	0.5	A
P_D	Collector Power Dissipation	625	mW
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	200	°C / W
T_j	Junction Temperature	150	°C
T_{stg}	Storage Temperature	-55~+150	°C

ORDERING INFORMATION

Part Number	Package	Packing Method	Pack Quantity
S8050	TO-92	Bulk	1000pcs/Bag
S8050-TA	TO-92	Tape	2000pcs/Box

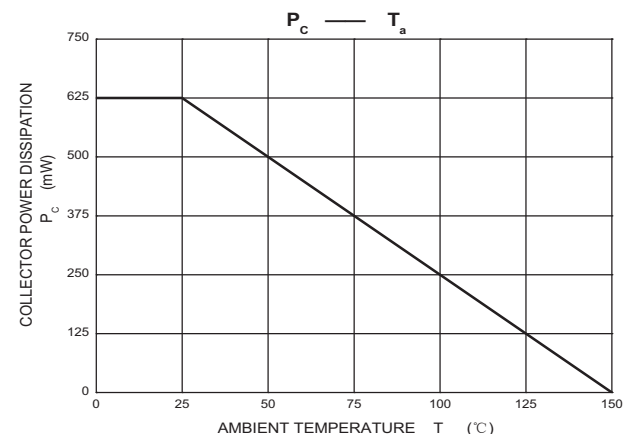
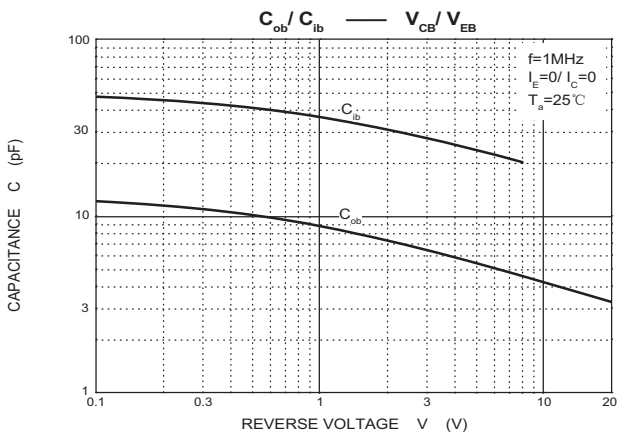
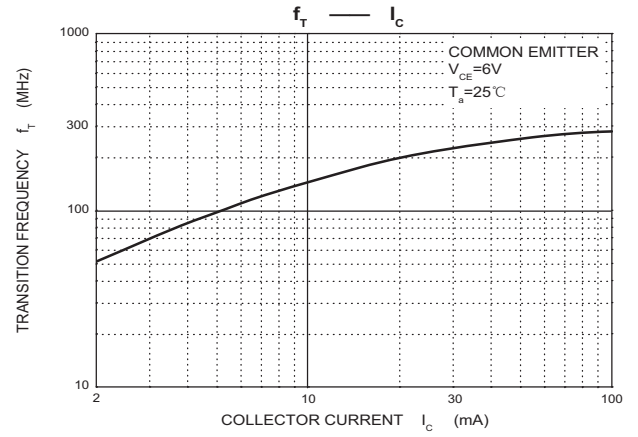
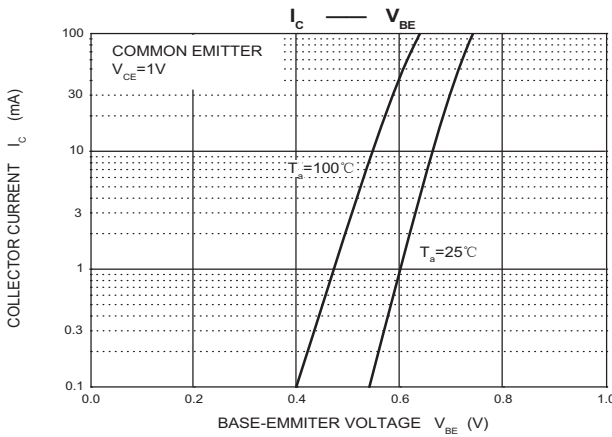
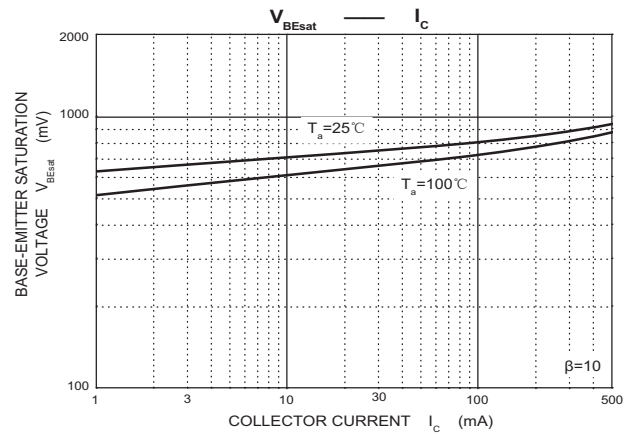
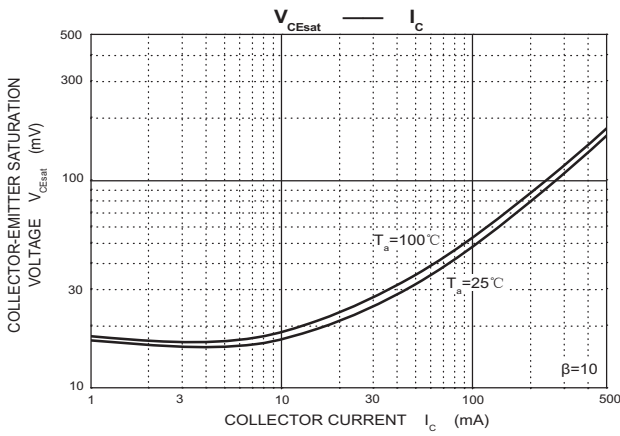
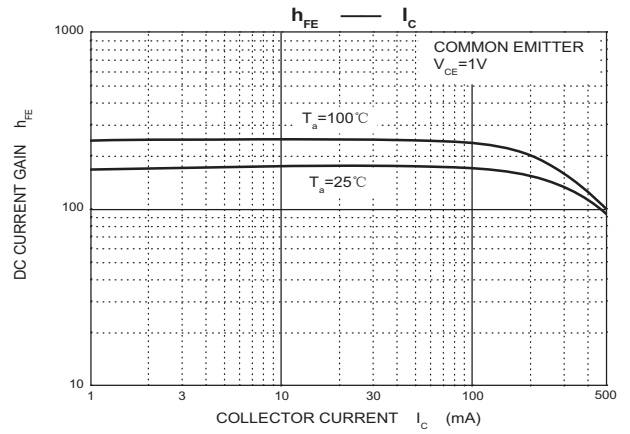
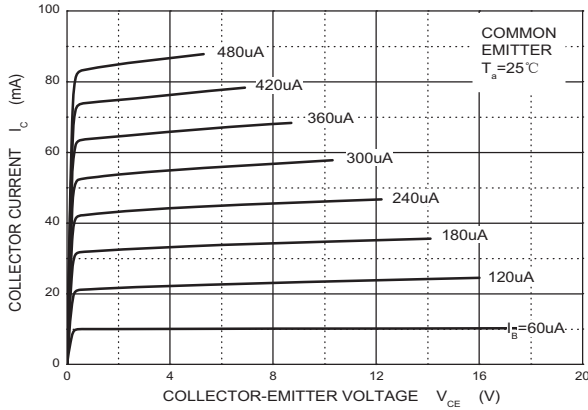
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CB0}$	$I_C=100\mu A, I_E=0$	40			V
Collector-emitter breakdown voltage	$V_{(BR)CE0}$	$I_C=0.1mA, I_B=0$	25			V
Emitter-base breakdown voltage	$V_{(BR)EB0}$	$I_E=100\mu A, I_C=0$	5			V
Collector cut-off current	I_{CB0}	$V_{CB}=40V, I_E=0$			0.1	μA
Collector cut-off current	I_{CE0}	$V_{CE}=20V, I_B=0$			0.1	μA
Emitter cut-off current	I_{EB0}	$V_{EB}=5V, I_C=0$			0.1	μA
DC current gain	$h_{FE(1)}$	$V_{CE}=1V, I_C=50mA$	85		400	
	$h_{FE(2)}$	$V_{CE}=1V, I_C=500mA$	50			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=500mA, I_B=50mA$			0.6	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=500mA, I_B=50mA$			1.2	V
Transition frequency	f_T	$V_{CE}=6V, I_C=20mA, f=30MHz$	150			MHz

CLASSIFICATION OF $h_{FE(1)}$

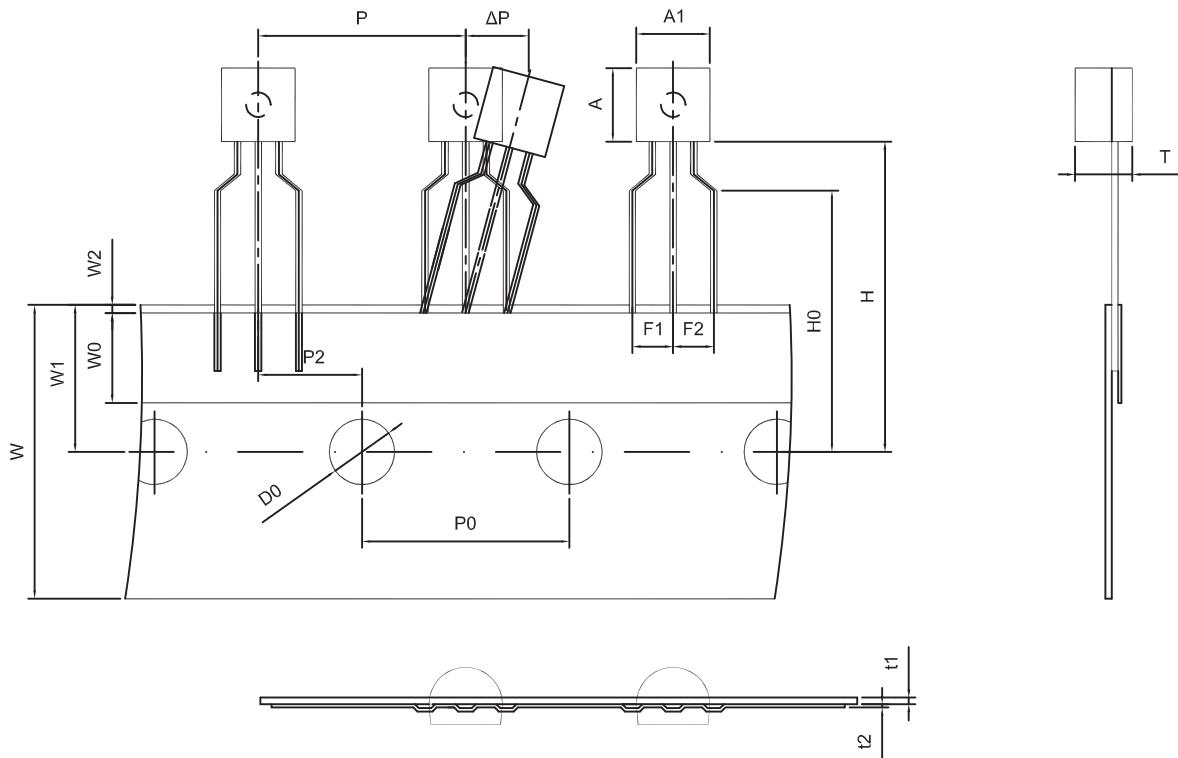
Rank	B	C	D	D3
Range	85-160	120-200	160-300	300-400

Typical Characteristics

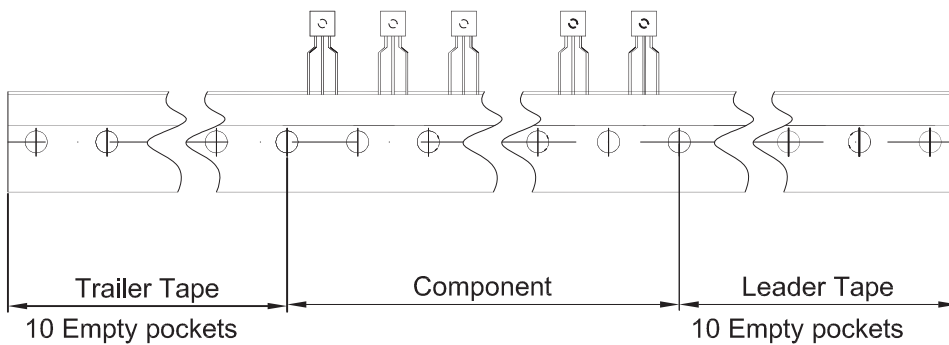
Static Characteristic



TO-92 PACKAGE TAPEING DIMENSION



Dimiensions are in millimeter								
A1	A	T	P	P0	P2	F1	F2	W
4.5	4.5	3.5	12.7	12.7	6.35	2.5	2.5	18.0
W0	W1	W2	H	H0	D0	t1	t2	ΔP
6.0	9.0	1.0 MAX.	19.0	16.0	4.0	0.4	0.2	0



Package	Box	Box Size(mm)	Carton	Carton Size(mm)
TO-92	2000 pcs	333×162×43	20,000 pcs	350×340×250