

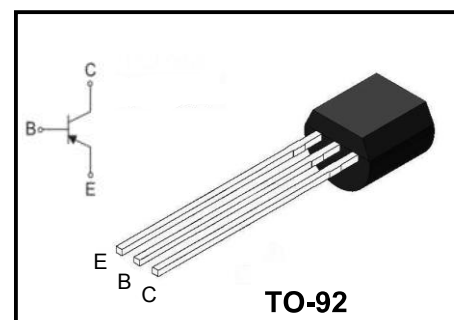
Plastic-Encapsulate Transistors

TRANSISTOR (PNP)

**1W Output Amplifier of Portable Radios
in Class B Push-pull Operation.**

FEATURES

- Complimentary to S8050
- Collector Current: $I_C=0.5A$



Absolute Maximum Ratings ($T_a=25^{\circ}C$)

Parameter	Symbol	Value	Unit
Collector-base voltage	BV_{CBO}	-40	V
Collector-emitter voltage	BV_{CEO}	-25	V
Emitter-base voltage	BV_{EBO}	-5	V
Collector current	I_C	-0.5	A
Collector power dissipation	P_C	625	mW
Junction temperature	T_J	150	$^{\circ}C$
Storage temperature	T_{STG}	-55 to 150	$^{\circ}C$

Electrical Characteristics ($T_a=25^{\circ}C$)

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Collector-base breakdown voltage	$I_C = -100\mu A, I_E = 0$	BV_{CBO}	-40			V
Collector-emitter breakdown voltage	$I_C = -1mA, I_B = 0$	BV_{CEO}	-25			V
Emitter-base breakdown voltage	$I_E = -100\mu A, I_C = 0$	BV_{EBO}	-5			V
Collector cut-off current	$V_{CB} = -40V, I_E = 0$	I_{CBO}			-0.1	μA
Emitter cut-off current	$V_{EB} = 5V, I_C = 0$	I_{EBO}			-0.1	μA
DC current gain	$V_{CE} = -1V, I_C = -50mA$	h_{FE1}	85		300	
	$V_{CE} = -1V, I_C = -500mA$	h_{FE2}	50			
Collector-emitter saturation voltage	$I_C = -500mA, I_B = -50mA$	V_{CESAT}			-0.6	V
base-emitter saturation voltage	$I_C = -500mA, I_B = -50mA$	V_{BESAT}			-1.2	V
Transition frequency	$V_{CE} = -6V, I_B = -20mA$	f_T	100			MHz

h_{FE2} Classification

Classification	S8550-B	S8550-C	S8550-D
Range	85-160	120-200	160-300

Typical Characteristics

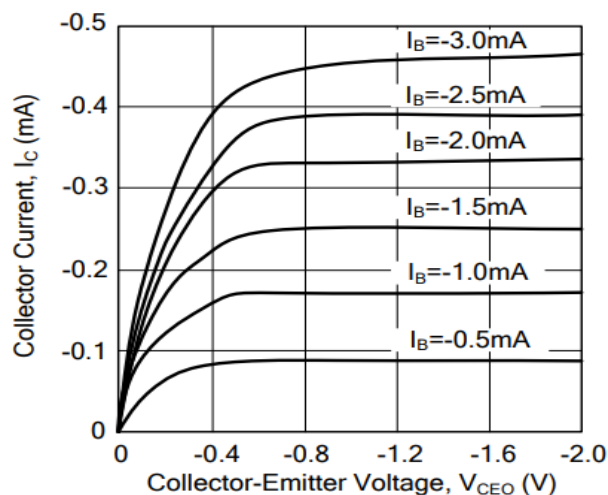


Figure 1. Static Characteristic

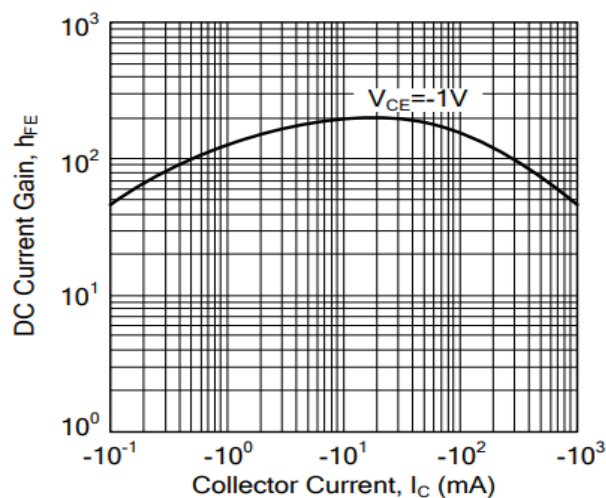


Figure 2. DC current Gain

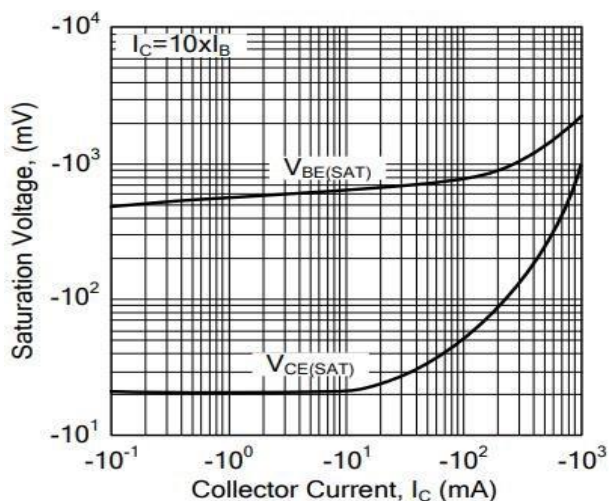


Figure 3. Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage

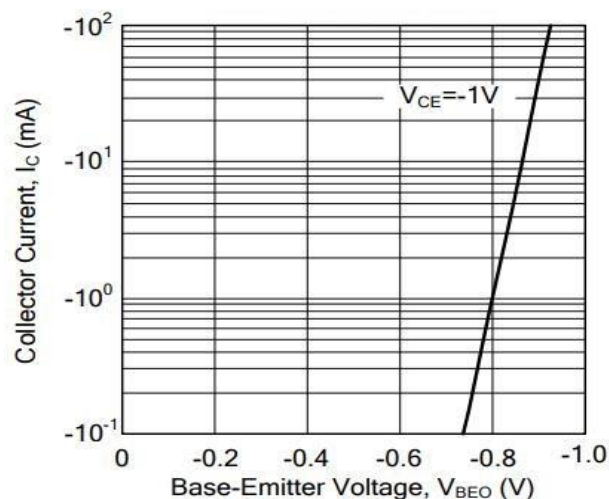


Figure 4. Base-Emitter On Voltage

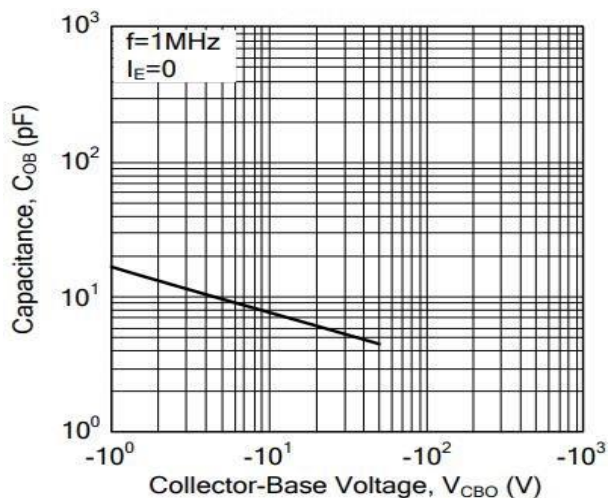


Figure 5. Collector Output Capacitance

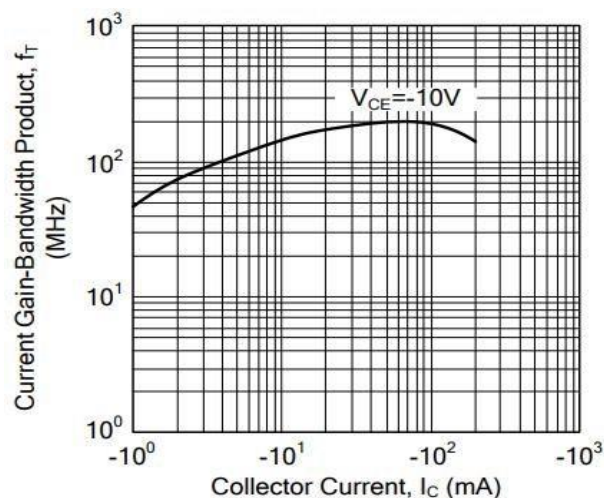


Figure 6. Current Gain Bandwidth Product

Ordering information

Package	Packing Description	Base Quantity
TO-92	Bulk	1000pcs/Bag
	Tape	2000pcs/Box

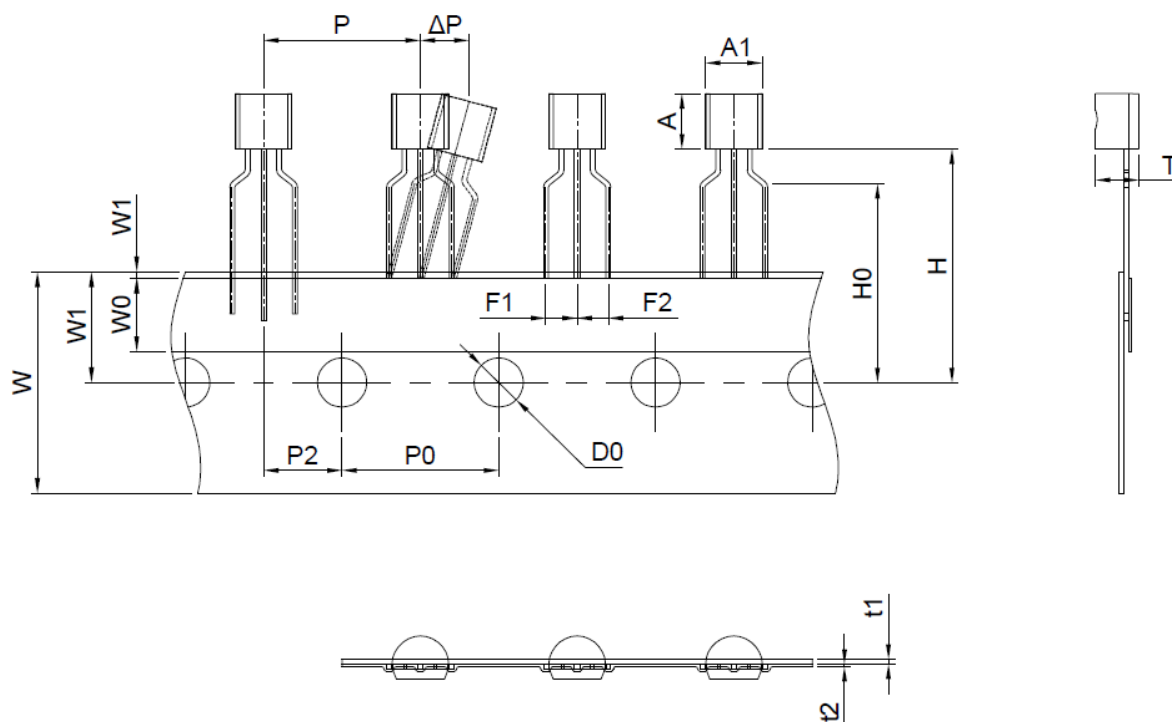
Package Dimensions

TO-92

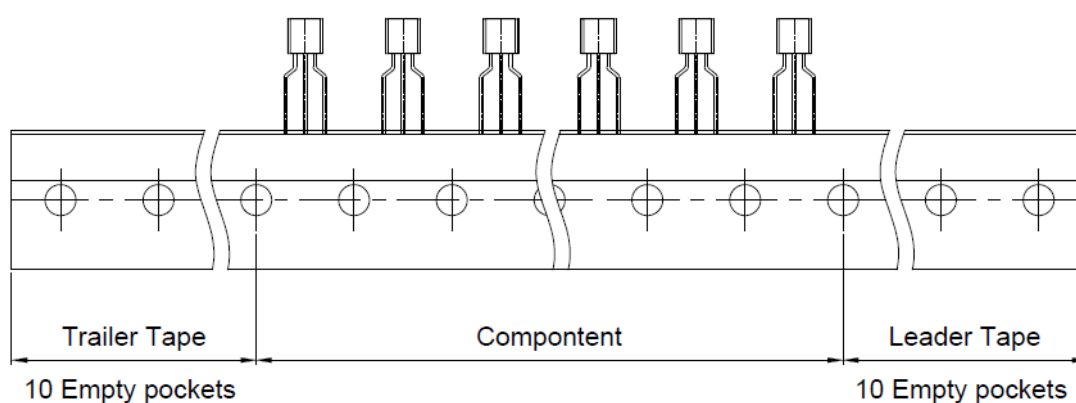
Dim	Millimeter		Inches	
	Min.	Max.	Min.	Max.
A	3.30	3.70	0.130	0.146
A1	2.30	2.70	0.091	0.106
b	0.40	0.50	0.016	0.020
b1	0.50	0.70	0.020	0.028
c	0.35	0.45	0.014	0.018
D	4.45	4.70	0.175	0.185
E	4.40	4.65	0.173	0.183
e	1.17	1.37	0.046	0.054
e1	2.34	2.64	0.092	0.104
L	13.50	14.50	0.531	0.571
L1	1.80	2.20	0.071	0.087

Taping Dimensions

TO-92



Dimiensions are in millimeter								
A	A1	T	P	P0	P2	F1	F2	W
4.6	4.6	3.5	12.7	12.7	6.35	2.54	2.54	18.0
W0	W1	W2	H	H0	D0	t1	T2	ΔP
6.0	9.0	1.0Max	19.0	18.0	4.0	0.4	0.2	0



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