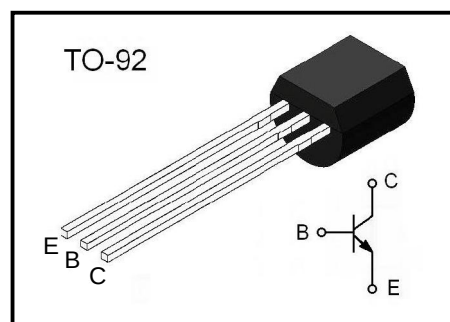


NPN Plastic-Encapsulate

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

Features

- Complimentary to SS8550
- Collector Current: $I_C = 1.5A$
- Collector Power Dissipation: $P_C = 1W$ ($T_C = 25^\circ C$)



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}	6	V
Collector Current	I_C	1.5	A
Collector Power Dissipation	P_C	1	W
Junction Temperature	T_j	150	$^\circ C$
Storage Temperature	T_{stg}	-55 ~ +150	$^\circ C$

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

Parameter	Symbol	Conditions	Value			Unit
			Min	Typ	Max	
Collector-base breakdown voltage	BV_{CBO}	$I_C = 100\mu A, I_E = 0$	40			V
Collector-emitter breakdown voltage	BV_{CEO}	$I_C = 1mA, I_B = 0$	25			V
Emitter-base breakdown voltage	BV_{EBO}	$I_E = 100\mu A, I_C = 0$	6			V
Collector cut-off current	I_{CBO}	$V_{CB} = 35V, I_E = 0$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = 6V, I_C = 0$			0.1	μA
DC current gain	h_{FE1}	$V_{CE} = 1V, I_C = 5m$	45			
	h_{FE2}	$V_{CE} = 1V, I_C = 100mA$	85		320	
	h_{FE3}	$V_{CE} = 1V, I_C = 800mA$	40			
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	$V_{CE} = 6V, I_B = 20mA$	100			MHz

h_{FE2} Classification

Classification	SS8050-B	SS8050-C	SS8050-D
Range	85-160	120-200	160-320

Typical Characteristics

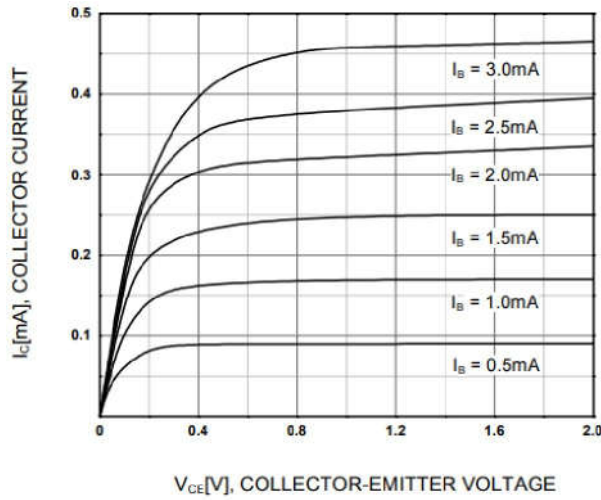


Figure 1. Static Characteristic

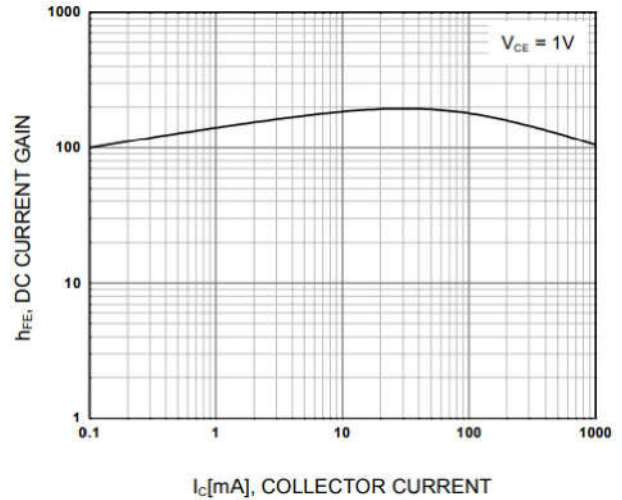


Figure 2. DC current Gain

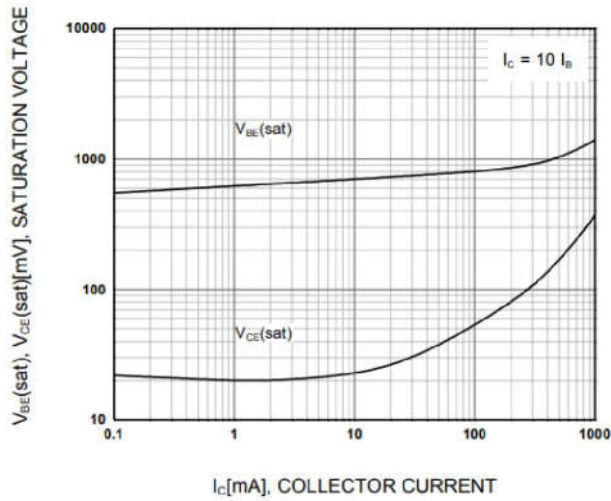


Figure 3. Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage

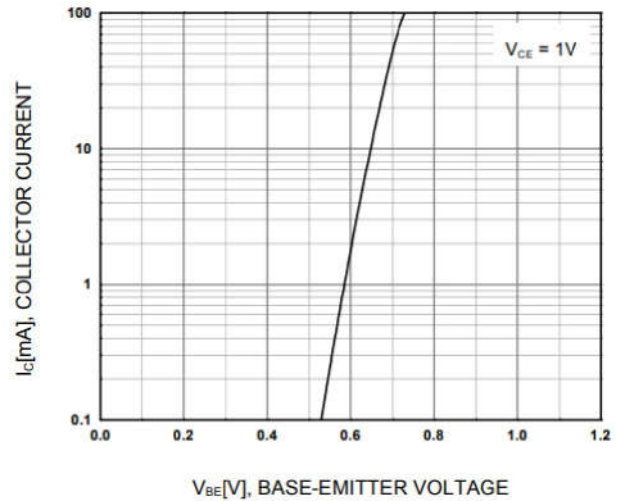


Figure 4. Base-Emitter On Voltage

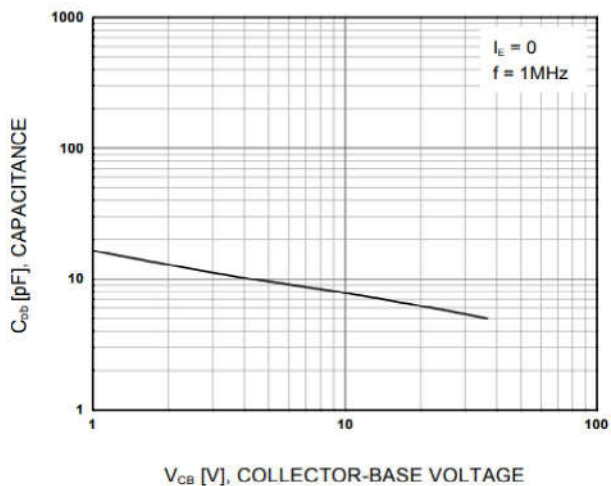


Figure 5. Collector Output Capacitance

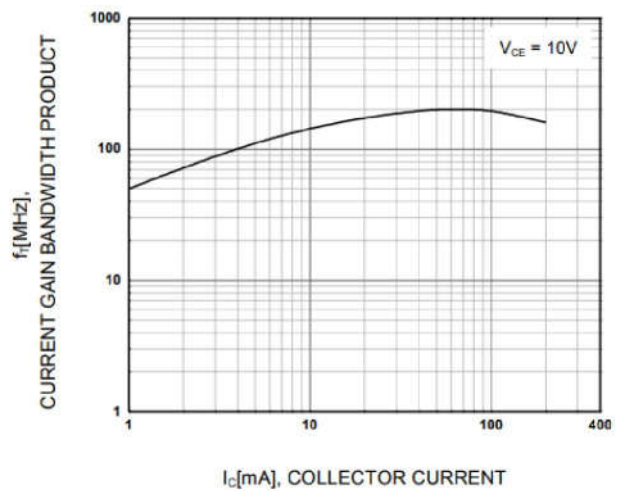


Figure 6. Current Gain Bandwidth Product

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

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