

G8050

NPN EPITAXIAL TRANSISTOR

Description

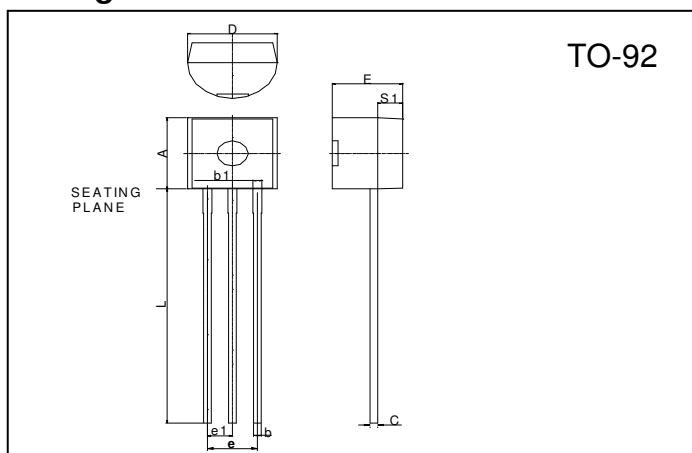
The G8050 is designed for use in 2W output amplifier of portable radios in class B push-pull operation.

Features

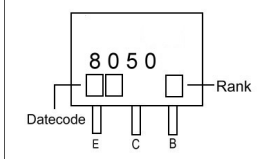
*High Collector current (I_C : 1.5A)

*Complementary to G8550

Package Dimensions



Marking :



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	4.45	4.7	D	4.44	4.7
S1	1.02	-	E	3.30	3.81
b	0.36	0.51	L	12.70	-
b1	0.36	0.76	e1	1.150	1.390
C	0.36	0.51	e	2.42	2.66

Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$, unless otherwise specified)

Parameter	Symbol	Ratings	Unit
Collector to Base Voltage	V_{CBO}	40	V
Collector to Emitter Voltage	V_{CEO}	25	V
Emitter to Base Voltage	V_{EBO}	6	V
Collect Current	I_C	1.5	A
Base Current	I_B	0.5	A
Junction Temperature	T_j	+150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 ~ +150	$^\circ\text{C}$
Total Power Dissipation	P_D	1	W

Electrical Characteristics ($T_a = 25^\circ\text{C}$, unless otherwise specified)

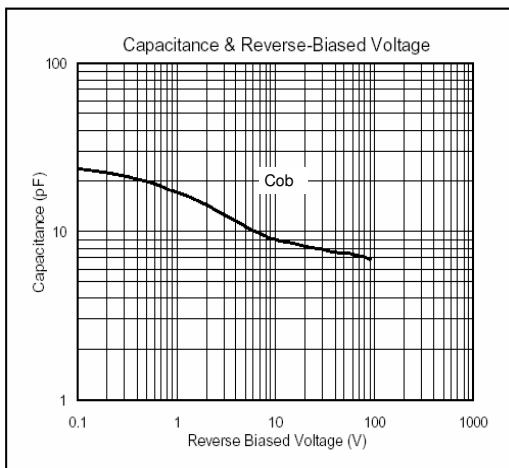
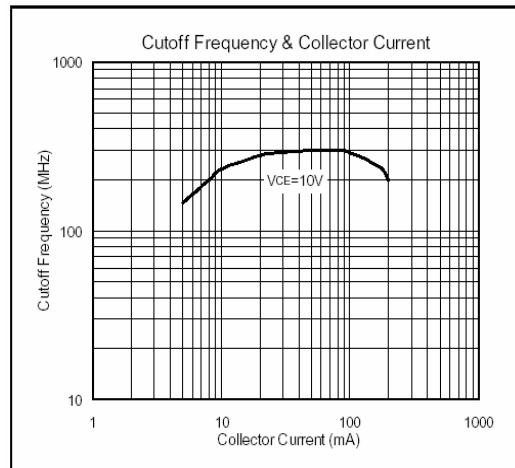
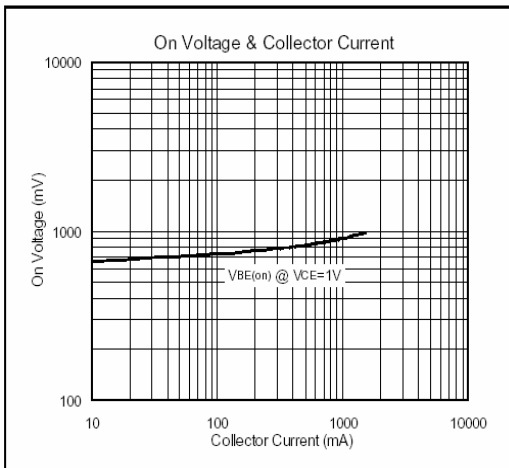
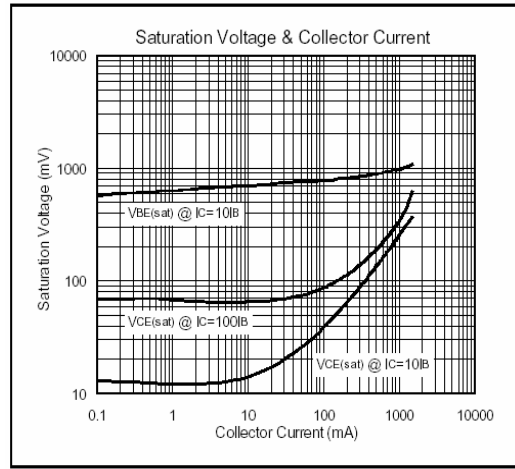
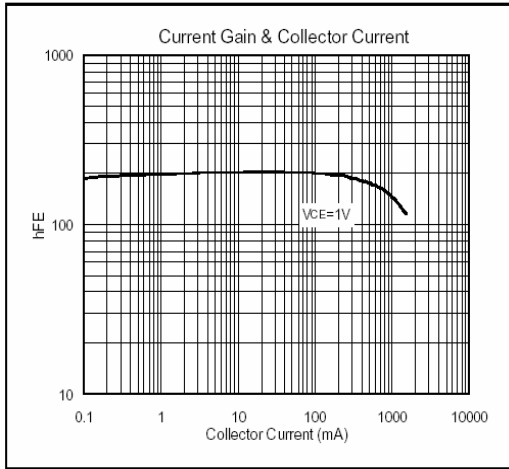
Symbol	Min.	Typ.	Max.	Unit	Test Conditions
V_{CBO}	40	-	-	V	$I_C=100\mu\text{A}$
V_{CEO}	25	-	-	V	$I_C=2\text{mA}$
V_{EBO}	6	-	-	V	$I_E=100\mu\text{A}$
I_{CBO}	-	-	100	nA	$V_{CB}=35\text{V}$
I_{EBO}	-	-	100	nA	$V_{BE}=6\text{V}$
* $V_{CE(sat)}$	-	-	0.5	V	$I_C=800\text{mA}$, $I_B=80\text{mA}$
* $V_{BE(sat)}$	-	-	1.2	V	$I_C=800\text{mA}$, $I_B=80\text{mA}$
* $V_{BE(on)}$	-	-	1	V	$V_{CE}=1\text{V}$, $I_C=10\text{mA}$
* h_{FE1}	45	-	-		$V_{CE}=1\text{V}$, $I_C=5\text{mA}$
* h_{FE2}	120	-	500		$V_{CE}=1\text{V}$, $I_C=100\text{mA}$
* h_{FE3}	40	-	-		$V_{CE}=1\text{V}$, $I_C=800\text{mA}$
fT	100	-	-	MHz	$V_{CE}=10\text{V}$, $I_C=50\text{mA}$, $f=100\text{MHz}$
Cob	-	9	-	pF	$V_{CB}=10\text{V}$, $I_E=0$, $f=1\text{MHz}$

* Pulse Test: Pulse Width $\leq 380\mu\text{s}$, Duty Cycle $\leq 2\%$

Classification Of h_{FE2}

Rank	C	D	E
Range	120 ~ 200	160 ~ 320	250 ~ 500

Characteristics Curve



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