

GI8050

NPN EPITAXIAL TRANSISTOR

Description

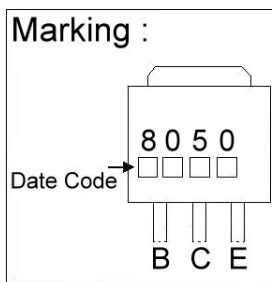
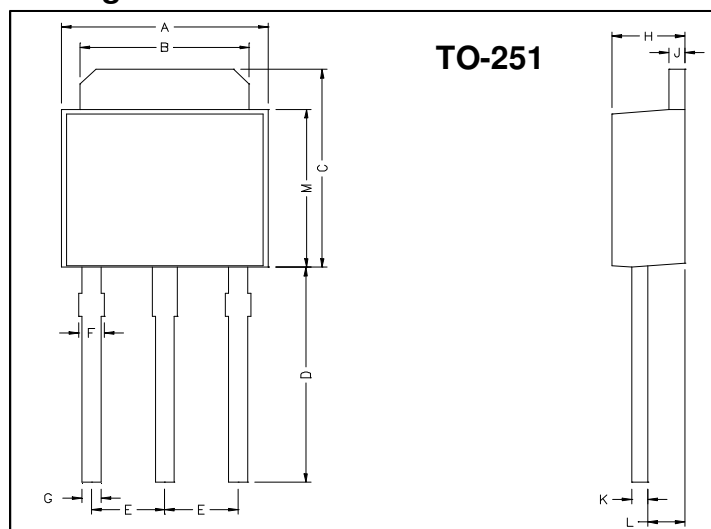
The GI8050 is designed for use in 2W output amplifier of portable radios in class B push-pull operation.

Features

*High Collector current (I_C : 1.5A)

*Complementary to GI8550

Package Dimensions



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	6.40	6.80	G	0.50	0.70
B	5.20	5.50	H	2.20	2.40
C	6.80	7.20	J	0.45	0.55
D	7.20	7.80	K	0.45	0.60
E	2.30 REF.		L	0.90	1.50
F	0.60	0.90	M	5.40	5.80

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

Parameter	Symbol	Ratings	Unit
Collector to Base Voltage	V_{CB0}	40	V
Collector to Emitter Voltage	V_{CEO}	25	V
Emitter to Base Voltage	V_{EBO}	6	V
Collector Current	I_C	1.5	A
Base Current	I_B	0.5	A
Junction Temperature	T_j	+150	$^\circ\text{C}$
Storage Temperature	T_{STG}	-55 ~ +150	$^\circ\text{C}$
Total Power Dissipation	P_D	1.25	W

Electrical Characteristics (Rating at 25°C ambient temperature unless otherwise specified)

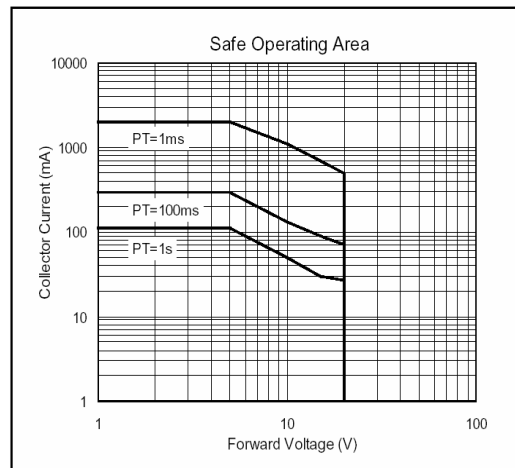
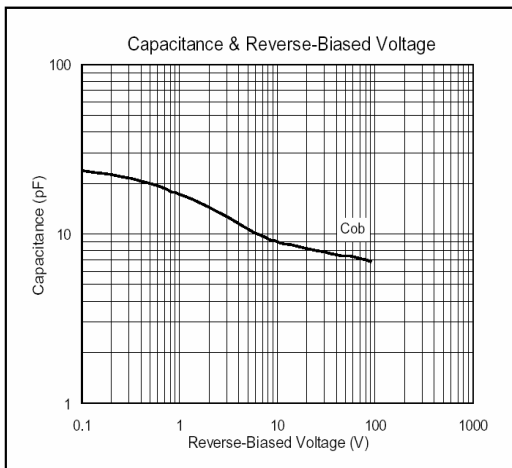
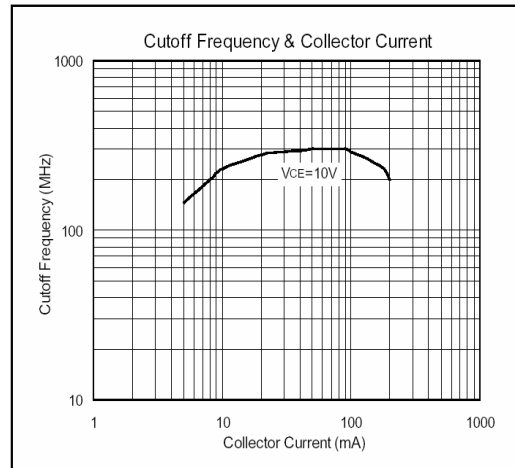
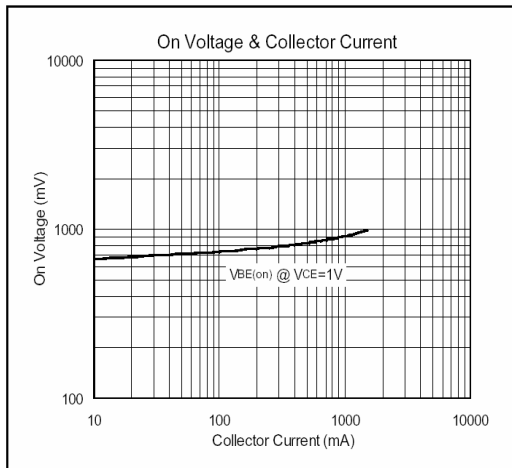
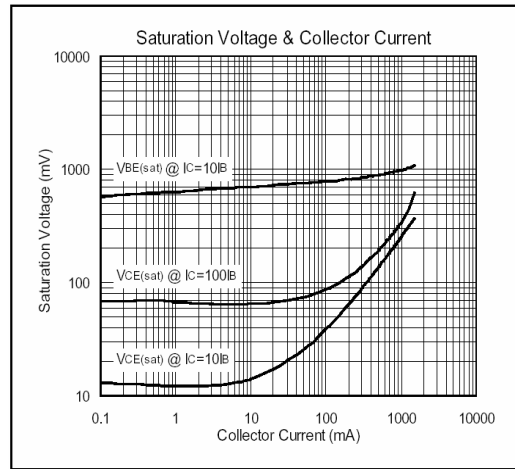
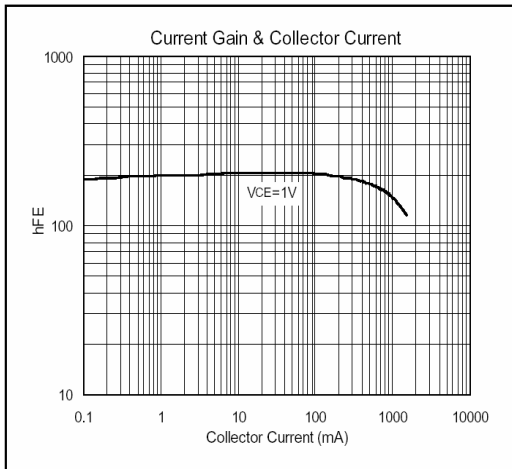
Symbol	Min.	Typ.	Max.	Unit	Test Conditions
V_{CB0}	40	-	-	V	$I_C=100\mu\text{A}$
V_{CEO}	25	-	-	V	$I_C=2\text{mA}$
V_{EBO}	6	-	-	V	$I_E=100\mu\text{A}$
I_{CBO}	-	-	100	nA	$V_{CB}=35\text{V}$
I_{EBO}	-	-	100	nA	$V_{BE}=6\text{V}$
* $V_{CE(sat)}$	-	-	0.5	V	$I_C=800\text{mA}$, $I_B=80\text{mA}$
* $V_{BE(sat)}$	-	-	1.2	V	$I_C=800\text{mA}$, $I_B=80\text{mA}$
* $V_{BE(on)}$	-	-	1.0	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 ~ 300	250 ~ 500

Characteristics Curve



Important Notice:

- All rights are reserved. Reproduction in whole or in part is prohibited without the prior written approval of GTM.
- GTM reserves the right to make changes to its products without notice.
- GTM semiconductor products are not warranted to be suitable for use in life-support Applications, or systems.
- GTM assumes no liability for any consequence of customer product design, infringement of patents, or application assistance.

Head Office And Factory:

- **Taiwan:** No. 17-1 Tatung Rd. Fu Kou Hsin-Chu Industrial Park, Hsin-Chu, Taiwan, R. O. C.
- TEL : 886-3-597-7061 FAX : 886-3-597-9220, 597-0785
- **China:** (201203) No.255, Jang-Jiang Tsai-Lueng RD. , Pu-Dung-Hsin District, Shang-Hai City, China
- TEL : 86-21-5895-7671 ~ 4 FAX : 86-21-38950165