

G8051

NPN EPITAXIAL TRANSISTOR

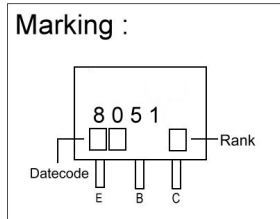
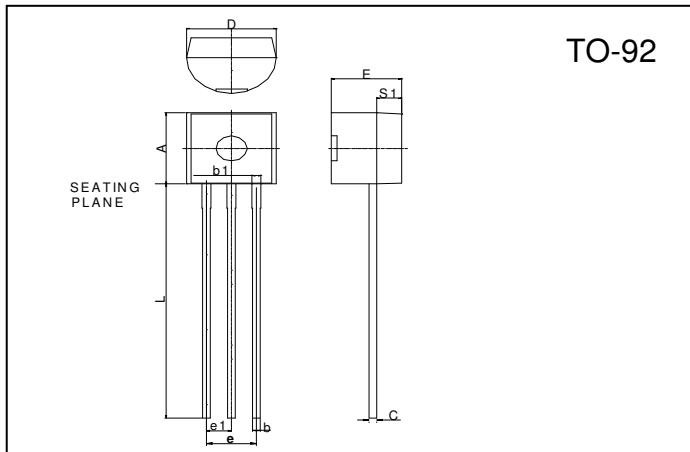
Description

The G8051 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 G8551

Package Dimensions



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°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
Collect Current	I _C	1.5	A
Base Current	I _B	0.5	A
Junction Temperature	T _j	+150	°C
Storage Temperature Range	T _{STG}	-55 ~ +150	°C
Total Power Dissipation	P _D	1	W

Electrical Characteristics (T_a = 25°C, unless otherwise specified)

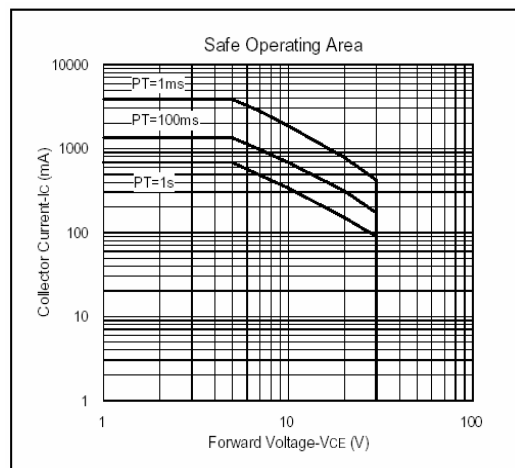
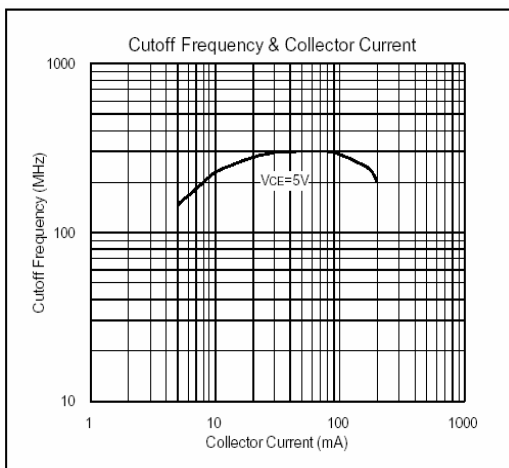
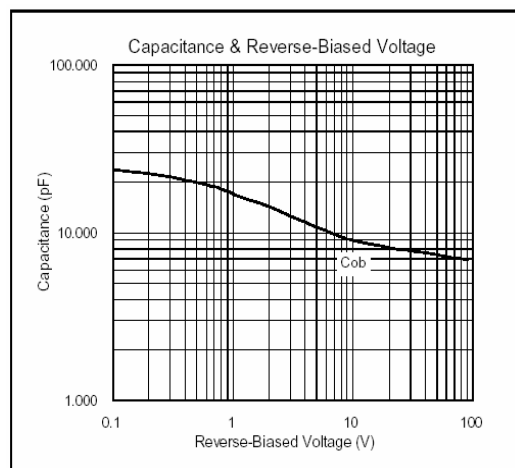
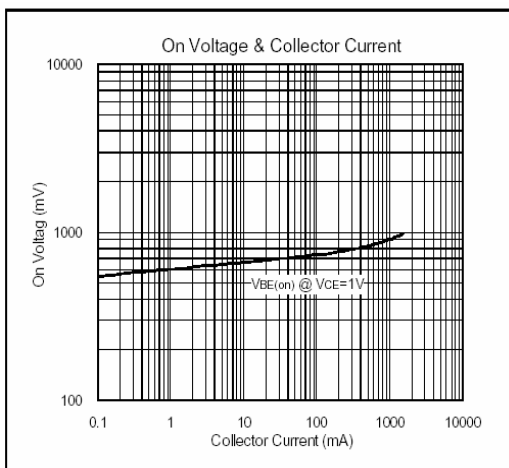
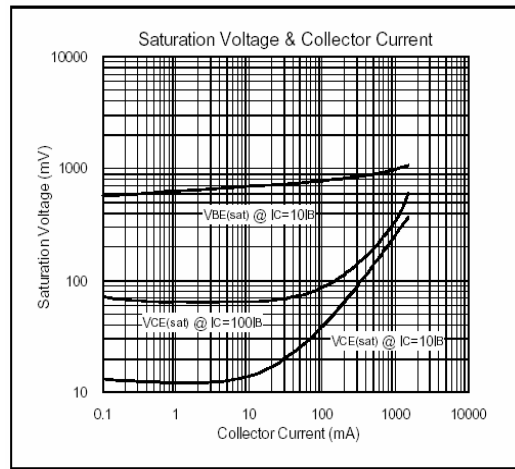
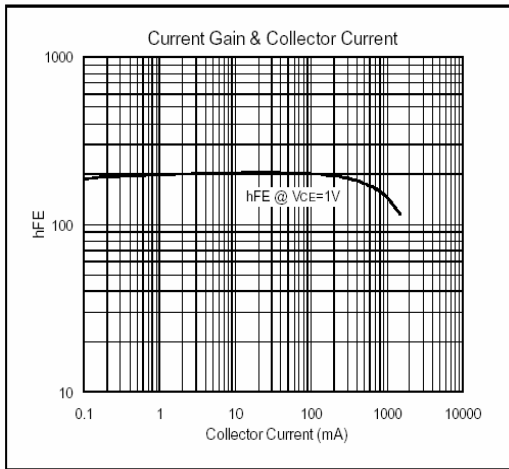
Symbol	Min.	Typ.	Max.	Unit	Test Conditions
V _{CB0}	40	-	-	V	I _C =100uA
V _{CEO}	25	-	-	V	I _C =2mA
V _{EBO}	6	-	-	V	I _E =100uA
I _{CB0}	-	-	100	nA	V _{CB} =35V
I _{EBO}	-	-	100	nA	V _{BE} =6V
*V _{CE(sat)}	-	-	0.5	V	I _C =800mA, I _B =80mA
*V _{BE(sat)}	-	-	1.2	V	I _C =800mA, I _B =80mA
*V _{BE(on)}	-	-	1	V	V _{CE} =1V, I _C =10mA
*h _{FE1}	45	-	-		V _{CE} =1V, I _C =5mA
*h _{FE2}	120	-	500		V _{CE} =1V, I _C =100mA
*h _{FE3}	40	-	-		V _{CE} =1V, I _C =800mA
f _T	100	-	-	MHz	V _{CE} =10V, I _C =50mA, f=100MHz
C _{ob}	-	9	-	pF	V _{CB} =10V, I _E =0, f=1MHz

* Pulse Test: Pulse Width ≤ 380μs, Duty Cycle ≤ 2%

Classification Of h_{FE1}

Rank	C	D	E
Range	120 ~ 200	160 ~ 320	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