

G2N5551

NPN EPITAXIAL PLANAR TRANSISTOR

Description

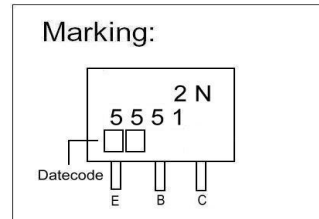
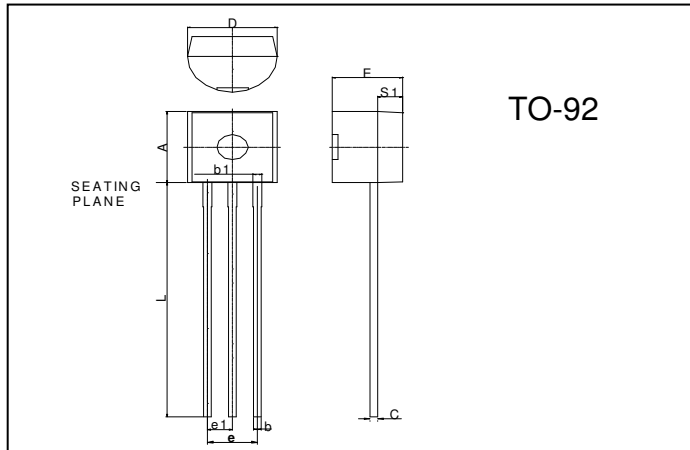
The G2N5551 is designed for general purpose switching and amplifier applications.

Features

*Complementary to PNP Type G2N5401

*High Collector – Emitter Breakdown Voltage ($V_{CE0} > 160V$ (@ $I_C=1mA$)

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 at $T_a = 25^\circ C$

Parameter	Symbol	Ratings	Unit
Junction Temperature	T_j	+150	$^\circ C$
Storage Temperature	T_{stg}	-55 ~ +150	$^\circ C$
Collector to Base Voltage	V_{CB0}	180	V
Collector to Emitter Voltage	V_{CE0}	160	V
Emitter to Base Voltage	V_{EB0}	6	V
Collector Current	I_C	600	mA
Total Power Dissipation	P_D	625	mW

Characteristics at $T_a = 25^\circ C$

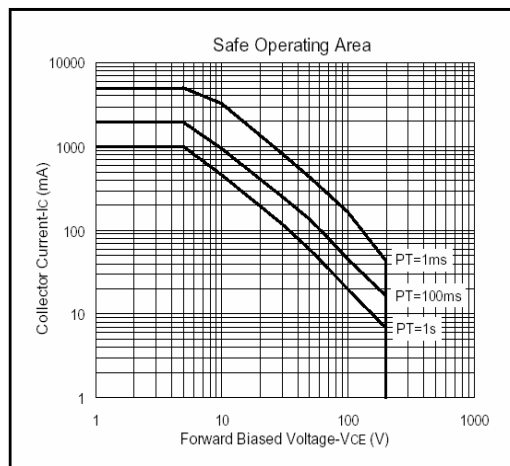
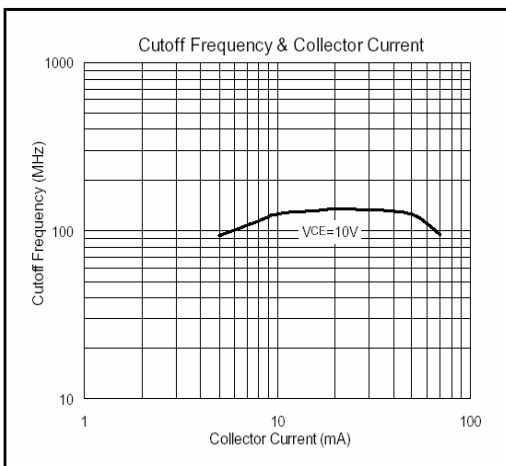
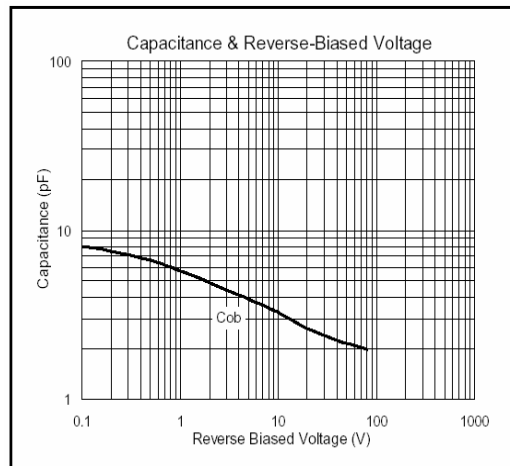
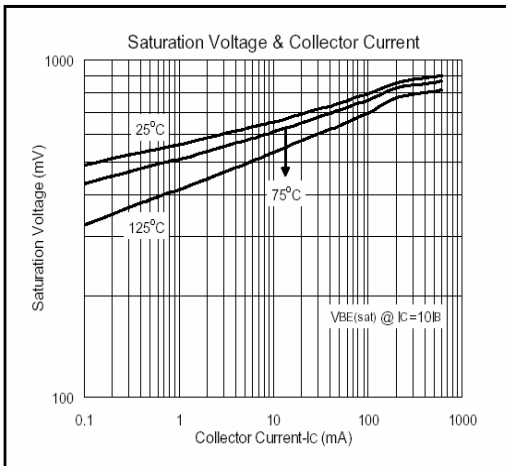
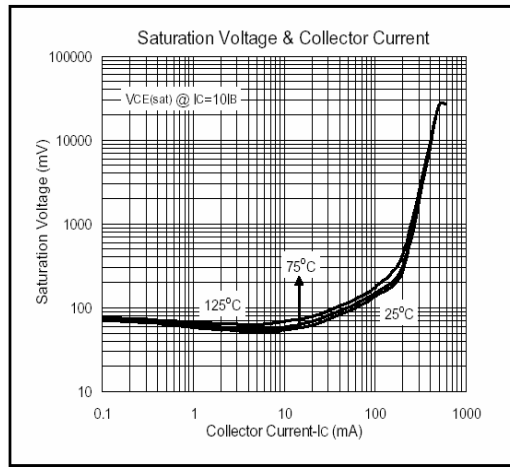
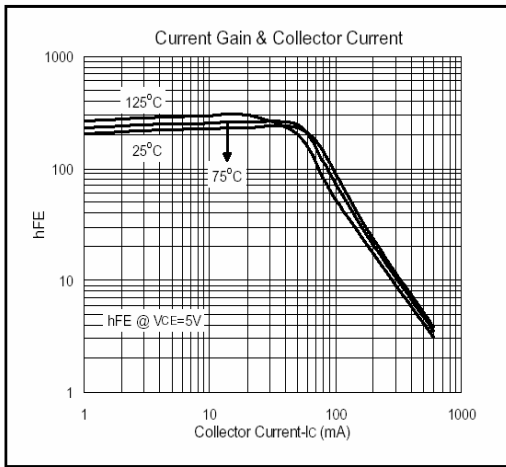
Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BV_{CB0}	180	-	-	V	$I_C=100\mu A, I_E=0$
BV_{CE0}	160	-	-	V	$I_C=1mA, I_B=0$
BV_{EB0}	6	-	-	V	$I_E=10\mu A, I_C=0$
I_{CB0}	-	-	50	nA	$V_{CB}=120V, I_E=0$
I_{EB0}	-	-	50	nA	$V_{EB}=4V, I_C=0$
* $V_{CE(sat)1}$	-	-	0.15	V	$I_C=10mA, I_B=1mA$
* $V_{CE(sat)2}$	-	-	0.2	V	$I_C=50mA, I_B=5mA$
* $V_{BE(sat)1}$	-	-	1	V	$I_C=10mA, I_B=1mA$
* $V_{BE(sat)2}$	-	-	1	V	$I_C=50mA, I_B=5mA$
* h_{FE1}	80	-	-		$V_{CE}=5V, I_C=1mA$
* h_{FE2}	80	160	400		$V_{CE}=5V, I_C=10mA$
* h_{FE3}	50	-	-		$V_{CE}=5V, I_C=50mA$
fT	100	-	300	MHz	$V_{CE}=10V, I_C=10mA, f=100MHz$
Cob	-	-	6	pF	$V_{CB}=10V, f=1MHz, I_E=0$

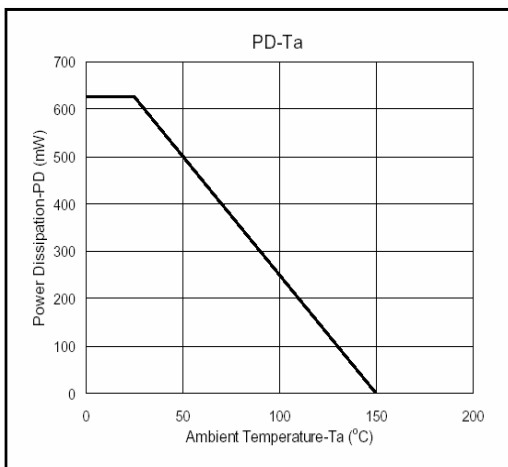
* Pulse Test: Pulse Width $\leq 380\mu s$, Duty Cycle $\leq 2\%$

Classification OF h_{FE2}

Rank	A	N	C
Range	80-200	100-250	160-400

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