

## G2N3906

### PNP EPITAXIAL PLANAR TRANSISTOR

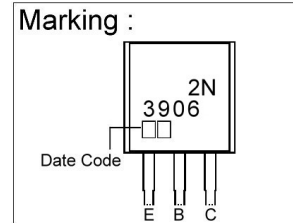
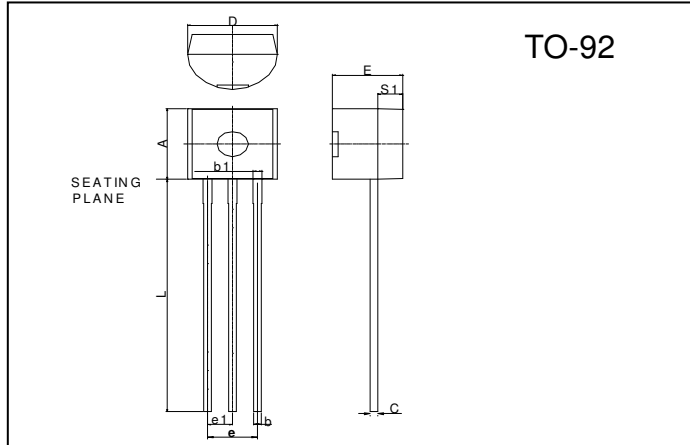
#### Description

The G2N3906 is designed for general purpose switching and amplifier applications.

#### Features

- \*Pb-free package are available
- \*Collector-Emitter Voltage:  $V_{CEO} = -40V$
- \*Collect Dissipation:  $P_c (max) = 625mW$
- \*Complementary to G2N3904

#### 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

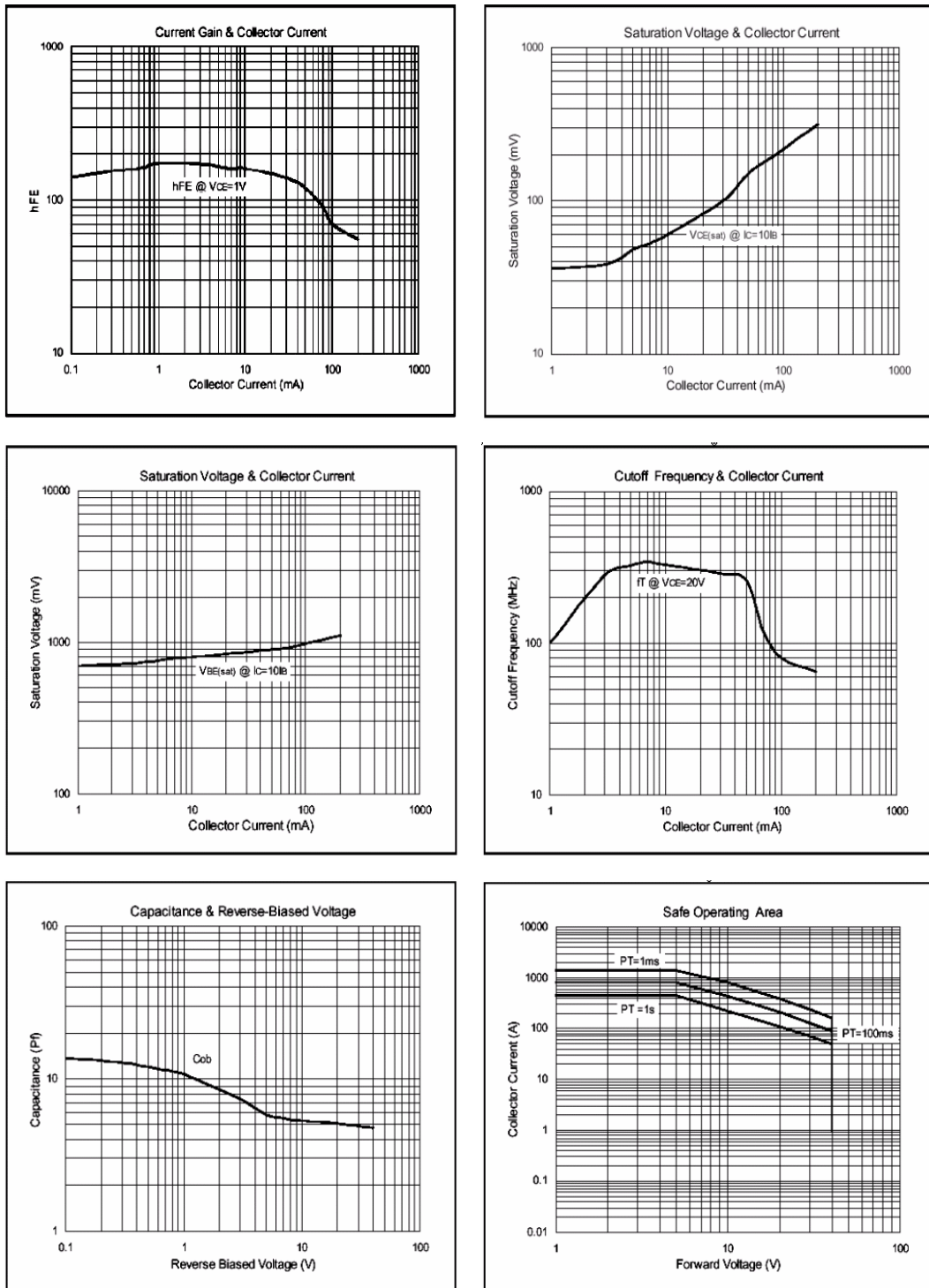
#### Absolute Maximum Ratings (Ta = 25°C, unless otherwise specified)

Parameter	Symbol	Ratings	Unit
Collector to Base Voltage	$V_{CBO}$	-40	V
Collector to Emitter Voltage	$V_{CEO}$	-40	V
Emitter to Base Voltage	$V_{EBO}$	-5	V
Collect Current(DC)	$I_c$	-200	mA
Junction Temperature	$T_j$	+150	°C
Storage Temperature Range	$T_{STG}$	-55 ~ +150	°C
Total Power Dissipation	$P_D$	625	mW

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

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
$V_{CBO}$	-40	-	-	V	$I_C = -10\mu A, I_E = 0$
$V_{CEO}$	-40	-	-	V	$I_C = -1mA, I_B = 0$
$V_{EBO}$	-5	-	-	V	$I_E = -10\mu A, I_C = 0$
$I_{CEX}$	-	-	-50	nA	$V_{CE} = -30V, V_{EB} = -3V$
$I_{EBO}$	-	-	-50	nA	$V_{EB} = -3V$
$V_{CE(sat)1}$	-	-	-0.25	V	$I_C = -10mA, I_B = -1mA$
$V_{CE(sat)2}$	-	-	-0.4	V	$I_C = -50mA, I_B = -5mA$
$V_{BE(sat)1}$	-0.65	-	-0.85	V	$I_C = -10mA, I_B = -1mA$
$V_{BE(sat)2}$	-	-	-0.95	V	$I_C = -50mA, I_B = -5mA$
$h_{FE1}$	60	-	-		$V_{CE} = -1V, I_C = -0.1mA$
$h_{FE2}$	80	-	-		$V_{CE} = -1V, I_C = -1mA$
$h_{FE3}$	100	-	300		$V_{CE} = -1V, I_C = -10mA$
$h_{FE4}$	60	-	-		$V_{CE} = -1V, I_C = -50mA$
$h_{FE5}$	30	-	-		$V_{CE} = -1V, I_C = -100mA$
$f_T$	250	-	-	MHz	$V_{CE} = -20V, I_E = -10mA, f = 100MHz$
$C_{ob}$	-	-	4.5	pF	$V_{CB} = -10V, f = 100KHz$
$C_{ib}$	-	-	10	pF	$V_{EB} = -0.5V, f = 100KHz$
$t_d$	-	-	35	ns	$V_{CC} = -3V, V_{BE(OFF)} = -0.5V, I_C = -10mA, I_{B1} = -1mA$
$t_r$	-	-	35	ns	$V_{CC} = -3V, V_{BE(OFF)} = -0.5V, I_C = -10mA, I_{B1} = -1mA$
$t_{stg}$	-	-	225	ns	$V_{CC} = -3V, I_C = -10mA, I_{B1} = -I_{B2} = -1mA$
$t_f$	-	-	75	ns	$V_{CC} = -3V, I_C = -10mA, I_{B1} = -I_{B2} = -1mA$

## Characteristics Curve



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