

GE1046

PNP EPITAXIAL PLANAR TRANSISTOR

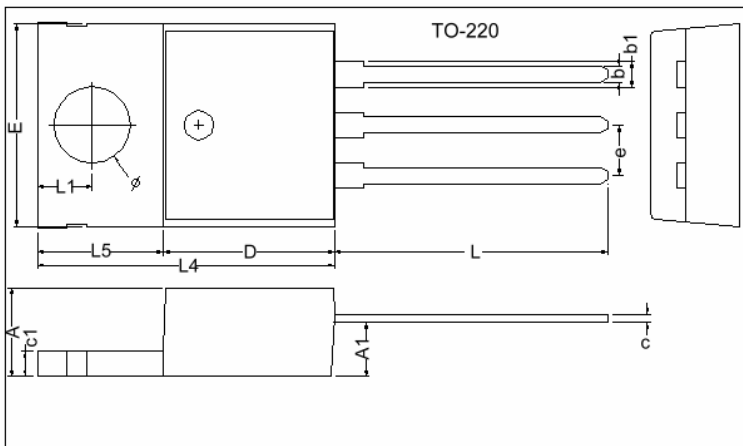
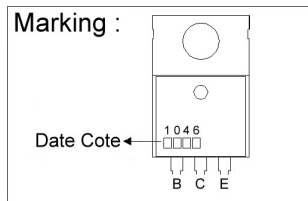
Description

The GE1046 is designed for general purpose application.

Features

- Low Collector Saturation Voltage : $V_{CE(sat)} = -1.0V$ (Max.) @ $I_C = -2A$, $I_B = -0.2A$,

Package Dimensions



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	4.40	4.80	c1	1.25	1.45
b	0.76	1.00	b1	1.17	1.47
c	0.36	0.50	L	13.25	14.25
D	8.60	9.00	e	2.54 REF.	
E	9.80	10.4	L1	2.60	2.89
L4	14.7	15.3	Ø	3.71	3.96
L5	6.20	6.60	A1	2.60	2.80

Absolute Maximum Ratings (TA=25°C)

Parameter		Symbol	Ratings	Unit
Collector to Base Voltage		V_{CBO}	-60	V
Collector to Emitter Voltage		V_{CEO}	-60	V
Emitter to Base Voltage		V_{EBO}	-7	V
Collector Current		I_C	-3	A
Base Current		I_B	-0.5	A
Total Device Dissipation	$T_A = 25^\circ C$	P_D	2	W
	$T_C = 25^\circ C$	P_D	20	W
Junction Temperature		T_J	150	°C
Storage Temperature		T_{stg}	-55 ~ +150	°C

Electrical Characteristics (TA = 25°C unless otherwise noted)

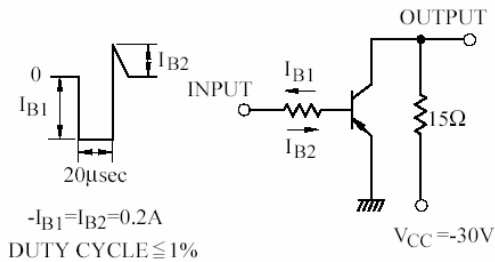
Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BV_{CBO}	-60	-	-	V	$I_C = -100\mu A$, $I_E = 0$
BV_{CEO}	-60	-	-	V	$I_C = -50mA$, $I_B = 0$
BV_{EBO}	-7	-	-	V	$I_E = -100\mu A$, $I_C = 0$
I_{CBO}	-	-	-100	μA	$V_{CB} = -60V$, $I_E = 0$
I_{EBO}	-	-	-100	μA	$V_{EB} = -7V$, $I_C = 0$
* $V_{CE(sat)}$	-	-	-1.0	V	$I_C = -2A$, $I_B = -0.2A$
* $V_{BE(on)}$	-	-	-1.0	V	$V_{CE} = -5V$, $I_C = -0.5A$
* h_{FE1}	100	-	320		$V_{CE} = -5V$, $I_C = -0.5A$
* h_{FE2}	20	-	-		$V_{CE} = -5V$, $I_C = -3A$
fT	-	30	-	MHz	$V_{CE} = -5V$, $I_C = -0.5A$
Cob	-	45	-	pF	$V_{CB} = -10V$, $I_E = 0$, $f = 1MHz$
ton (Turn-on Time)	-	0.4	-	uS	See specified test circuit
tstg (Storage Time)	-	1.7	-		
tr (Fall Time)	-	0.5	-		

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

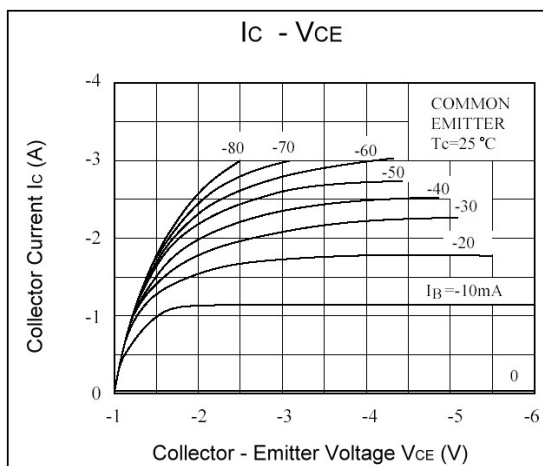
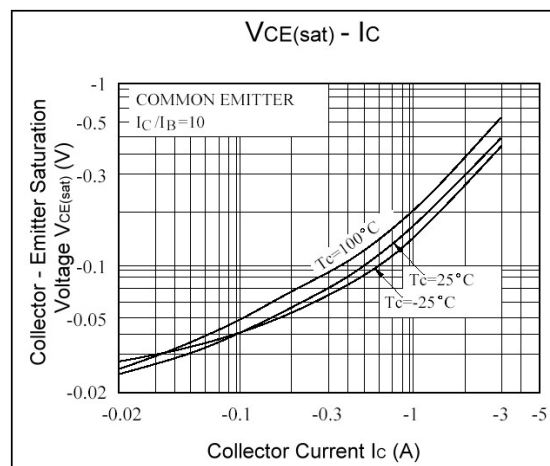
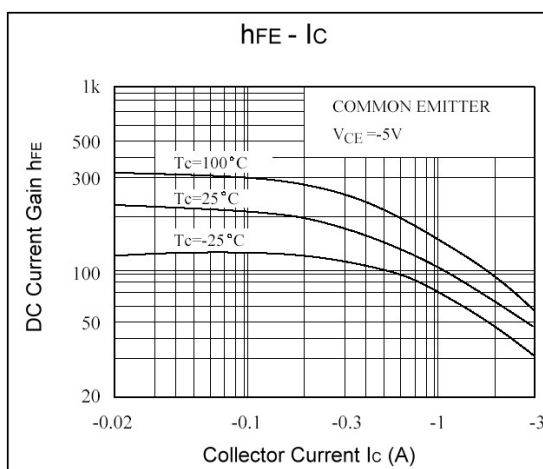
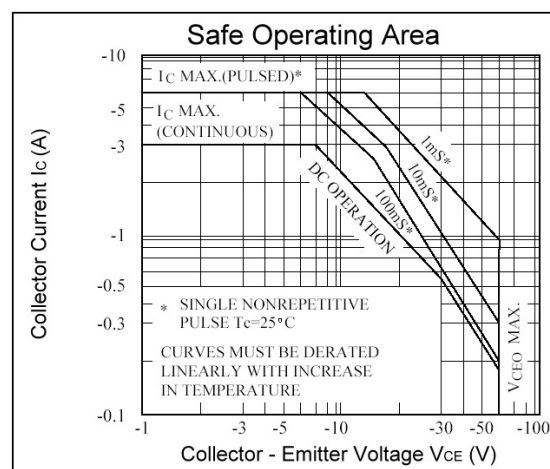
Classification Of hFE1

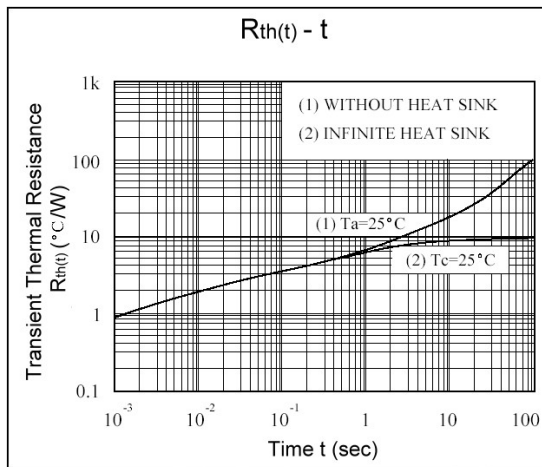
Rank	Y	GR
Range	100 - 200	160 - 320

Switching Time Test Circuit



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