

GI1202

PNP EPITAXIAL PLANAR SILICON TRANSISTOR

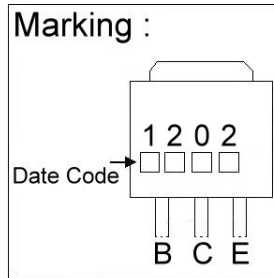
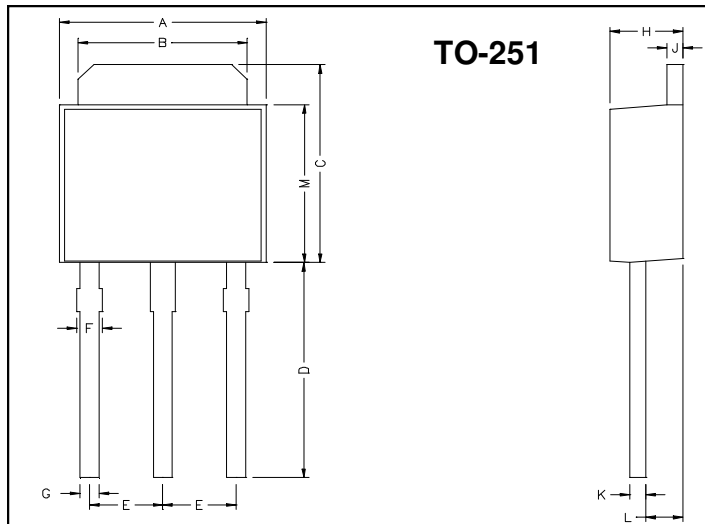
Description

The GI1202 is designed for voltage regulators, relay drivers, lamp drivers and electrical equipment applications.

Features

- *Large current capacitance and wide ASO
- *Low collector-to-emitter saturation voltage
- *Fast switching speed

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 (Ta = 25°C, unless otherwise specified)

Parameter	Symbol	Ratings	Unit
Collector to Base Voltage	VCBO	-60	V
Collector to Emitter Voltage	VCEO	-50	V
Emitter to Base Voltage	VEBO	-6	V
Collector Current	IC	-3	A
Collector Current(Pulse)	ICP	-6	A
Junction Temperature	Tj	+150	°C
Storage Temperature	TSTG	-55 ~ +150	°C
Total Power Dissipation	PD	1	W
	PD(Tc=25°C)	15	W

Electrical Characteristics (Rating at Ta=25°C)

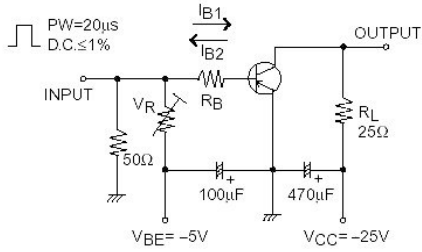
Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	-60	-	-	V	IC=-10uA, IE=0
BVCEO	-50	-	-	V	IC=-1mA, RE=∞
BVEBO	-6	-	-	V	IE=-10uA, IC=0
ICBO	-	-	-1	uA	VCB=-40V, IE=0
IEBO	-	-	-1	uA	VEB=-4V, IC=0
*VCE(sat)1	-	-0.35	-0.7	V	IC=-2A, IB=-100mA
*VBE(sat)	-	-0.94	-1.2	V	IC=-2A, IB=-100mA
*hFE1	100	-	560		VCE=-2V, IC=100mA
*hFE2	35	-	-		VCE=-2V, IC=3A
fT	-	150	-	MHz	VCE=-10V, IC=-50mA
Cob	-	39	-	pF	VCB=-10V, f=1MHz
ton (Turn-On Time)	-	70	-	ns	See specified test circuit.
tstg (Storage Time)	-	450	-	ns	See specified test circuit.
tf (Fall Time)	-	35	-	ns	See specified test circuit.

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

Classification Of hFE1

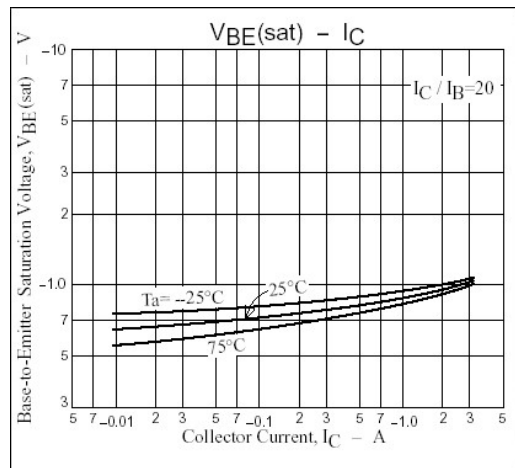
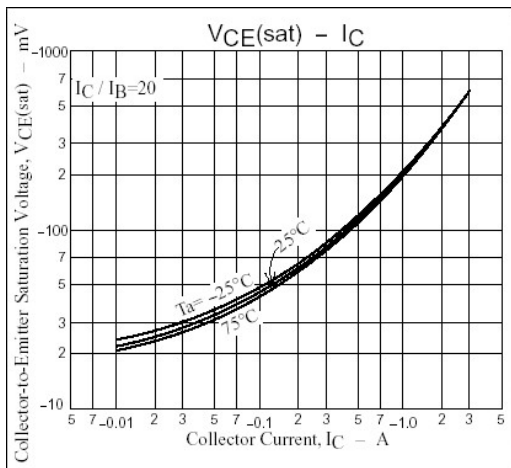
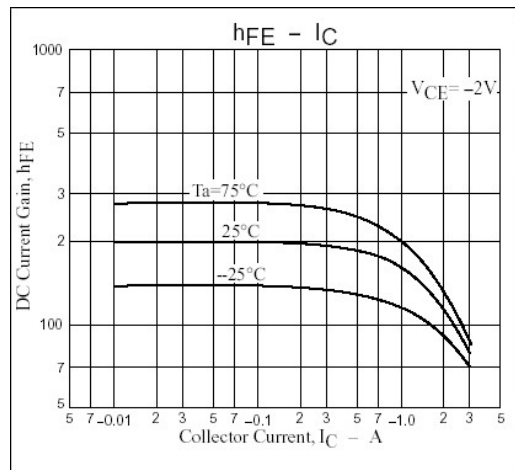
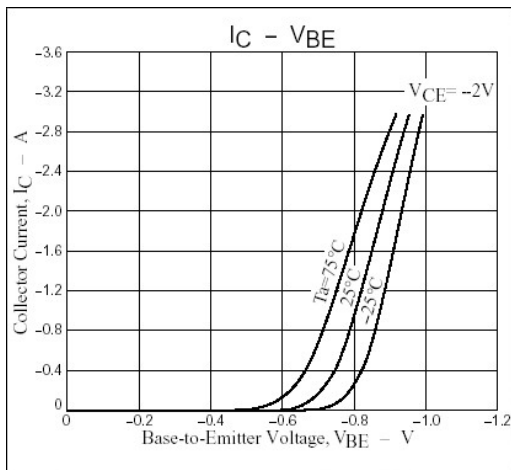
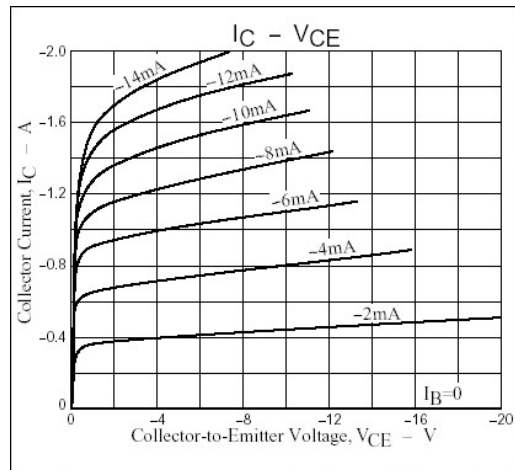
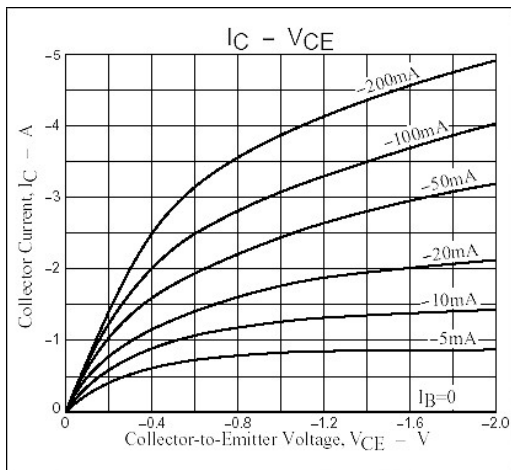
Rank	R	S	T	U
Range	100 ~ 200	140 ~ 280	200 ~ 400	280 ~ 560

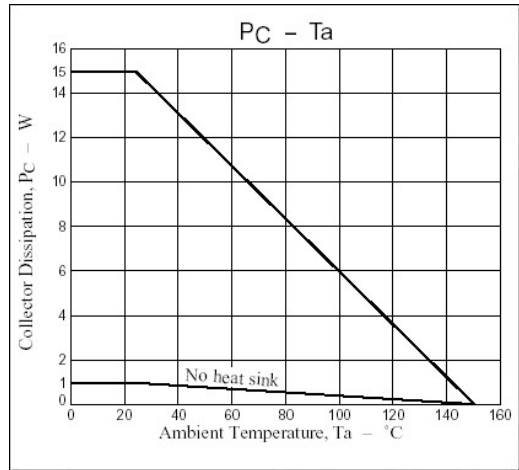
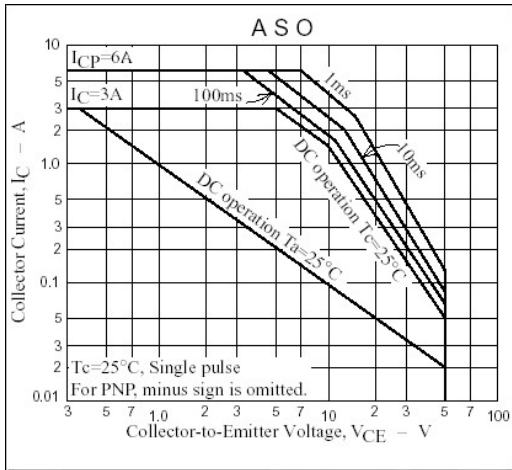
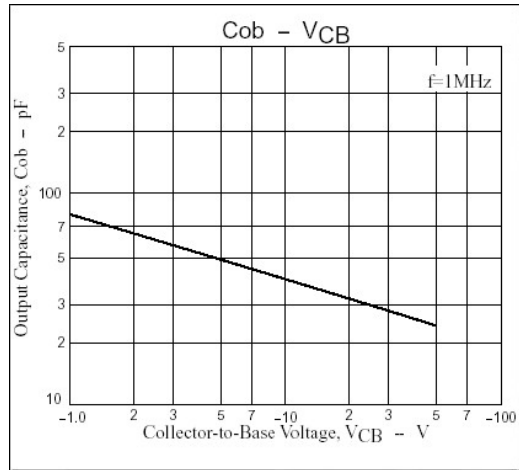
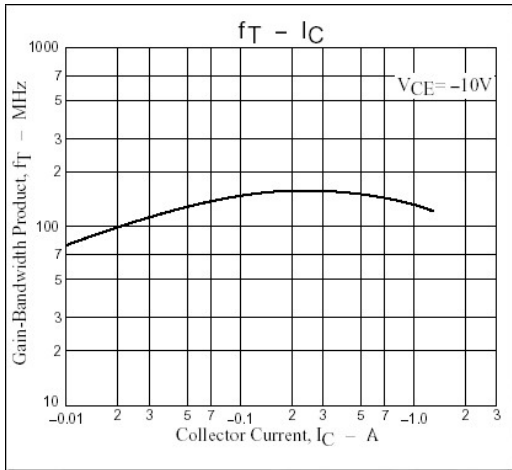
Switching Time Test Circuit



$$I_C = 10 I_{B1} = -10 I_{B2} = 1A$$

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