

# GTM CORPORATION

ISSUED DATE :2004/12/15  
REVISED DATE :2005/12/23B

## GJ122

### NPN EPITAXIAL PLANAR TRANSISTOR

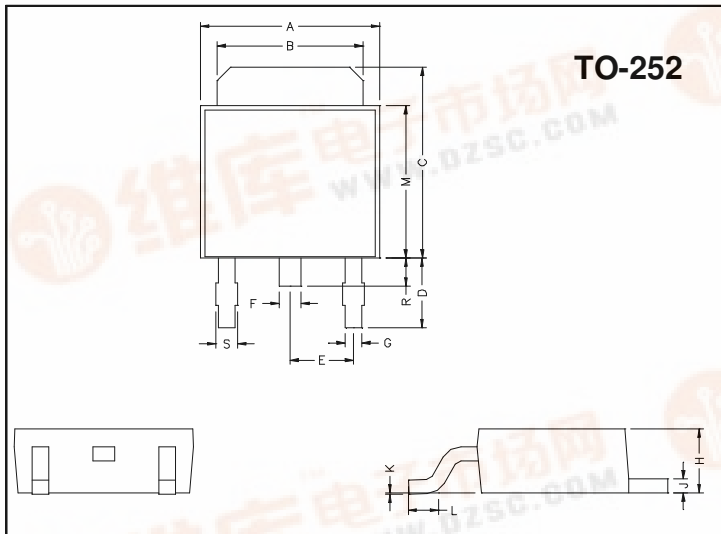
#### Description

The GJ122 is designed for use in general purposes and low speed switching applications.

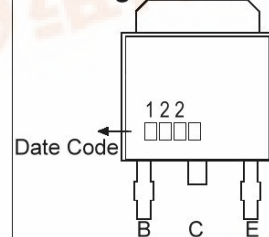
#### Features

- High DC current gain
- Built-in a damper diode at E-C

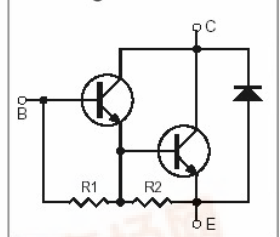
#### Package Dimensions



#### Marking :



#### Darlington Schematic



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	2.40	3.00	K	0	0.15
E	2.30 REF.		L	0.90	1.50
F	0.70	0.90	M	5.40	5.80
S	0.60	0.90	R	0.80	1.20

#### Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Ratings	Unit
Junction Temperature	Tj	+150	°C
Storage Temperature	Tstg	-55 ~ +150	°C
Collector to Base Voltage	BVCBO	100	V
Collector to Emitter Voltage	BVCEO	100	V
Emitter to Base Voltage	BVEBO	5	V
Collector Current	IC	5	A
Total Power Dissipation(Tc=25°C)	PD	20	W

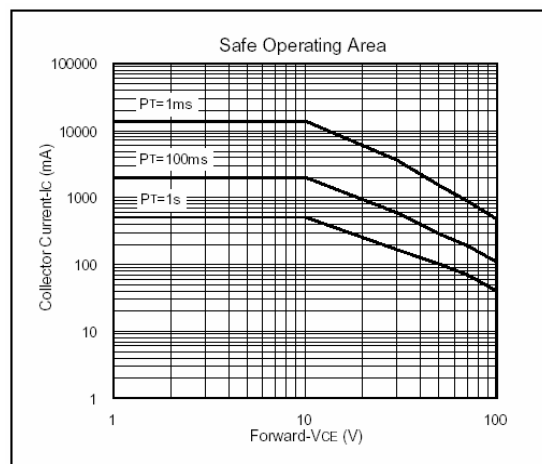
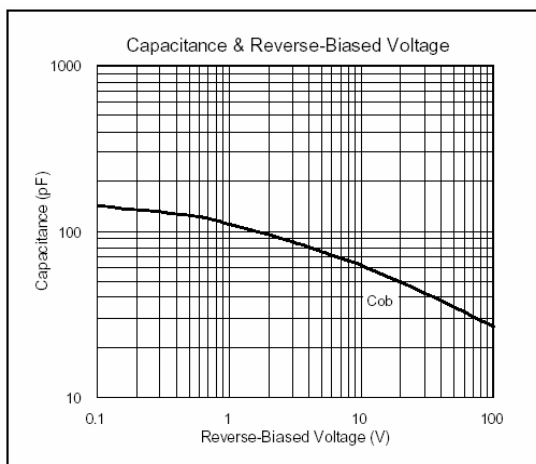
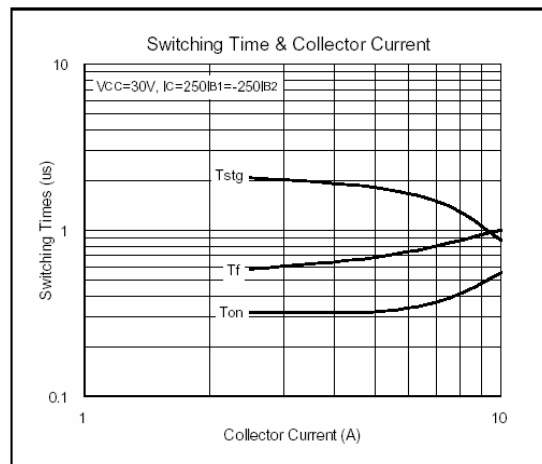
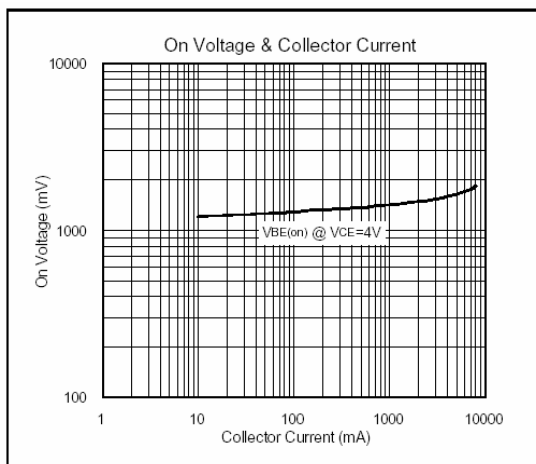
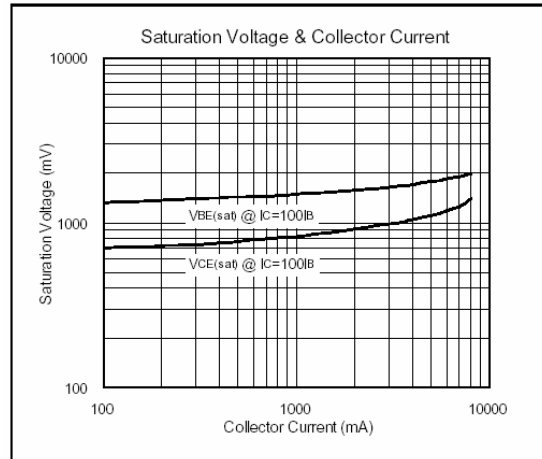
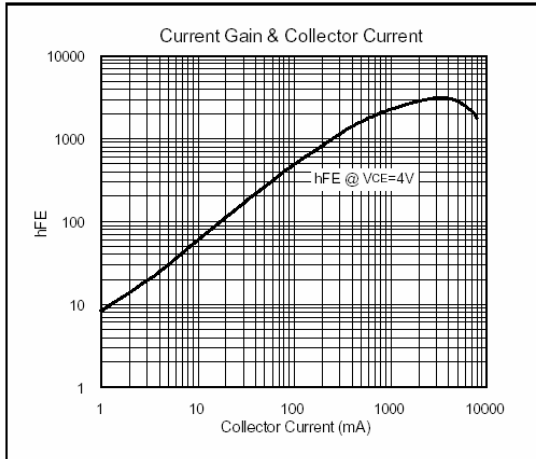
#### Electrical Characteristics (Rating at 25°C ambient temperature unless otherwise specified)

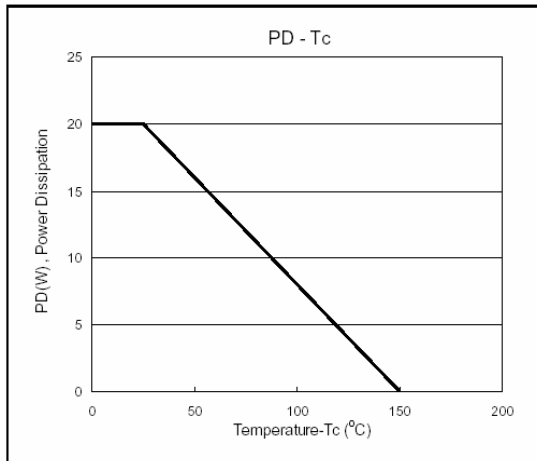
Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	100	-	-	V	Ic=1mA, IE=0
BVCEO	100	-	-	V	Ic=30mA, IB=0
BVEBO	5	-	-	V	IE=1mA, Ic=0
ICBO	-	-	10	µA	VCB=100V, IE=0
ICEO	-	-	10	µA	VCE=50V, IB=0
IEBO	-	-	2	mA	VEB=5V, Ic=0
*VCE(sat)1	-	-	2	V	Ic=3A, IB=16mA
*VCE(sat)2	-	-	4	V	Ic=5A, IB=20mA
*VBE(sat)	-	-	4	V	Ic=5A, IB=50mA
*VBE(on)	-	-	2.5	V	VCE=3V, Ic=3A
*hFE1	1	-	-	K	VCE=3V, Ic=500mA
*hFE2	1	-	-	K	VCE=3V, Ic=3A
Cob	-	-	200	pF	VCB=10V, f=1MHz

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



## Characteristics Curve





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