

GTM CORPORATION

ISSUED DATE :2004/12/17
REVISED DATE :

GM4401

NPN EPITAXIAL PLANAR TRANSISTOR

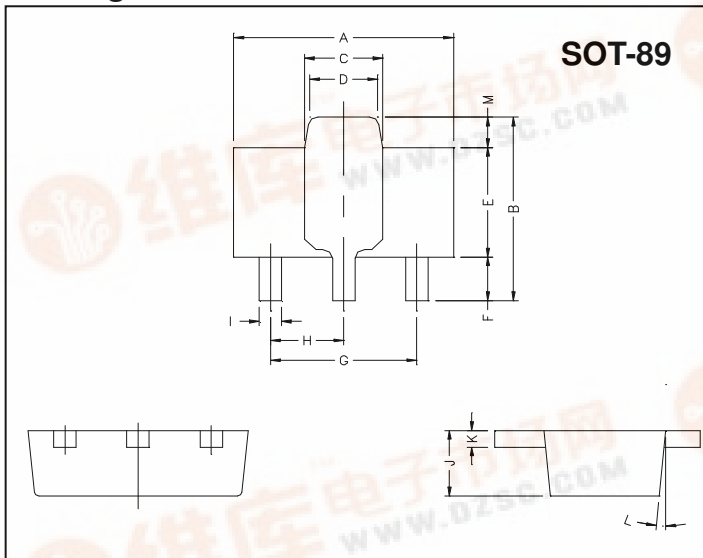
Description

The GM4401 is designed for general purpose switching and amplifier applications.

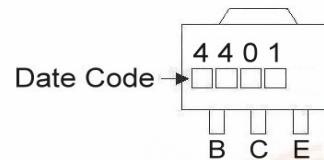
Features

- Complementary to GM4403
- High Power Dissipation: 1W at 25°C
- High DC Current Gain: 100-300 at 150mA

Package Dimensions



Marking :



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	4.4	4.6	G	3.00	REF.
B	4.05	4.25	H	1.50	REF.
C	1.50	1.70	I	0.40	0.52
D	1.30	1.50	J	1.40	1.60
E	2.40	2.60	K	0.35	0.41
F	0.89	1.20	L	5°	TYP.
			M	0.70	REF.

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 at Ta=25°C	VCBO	60	V
Collector to Emitter Voltage at Ta=25°C	VCEO	40	V
Emitter to Base Voltage at Ta=25°C	VEBO	5	V
Collector Current at Ta=25°C	IC	600	mA
Total Power Dissipation at Ta=25°C	PD	1	W

Characteristics at Ta = 25°C

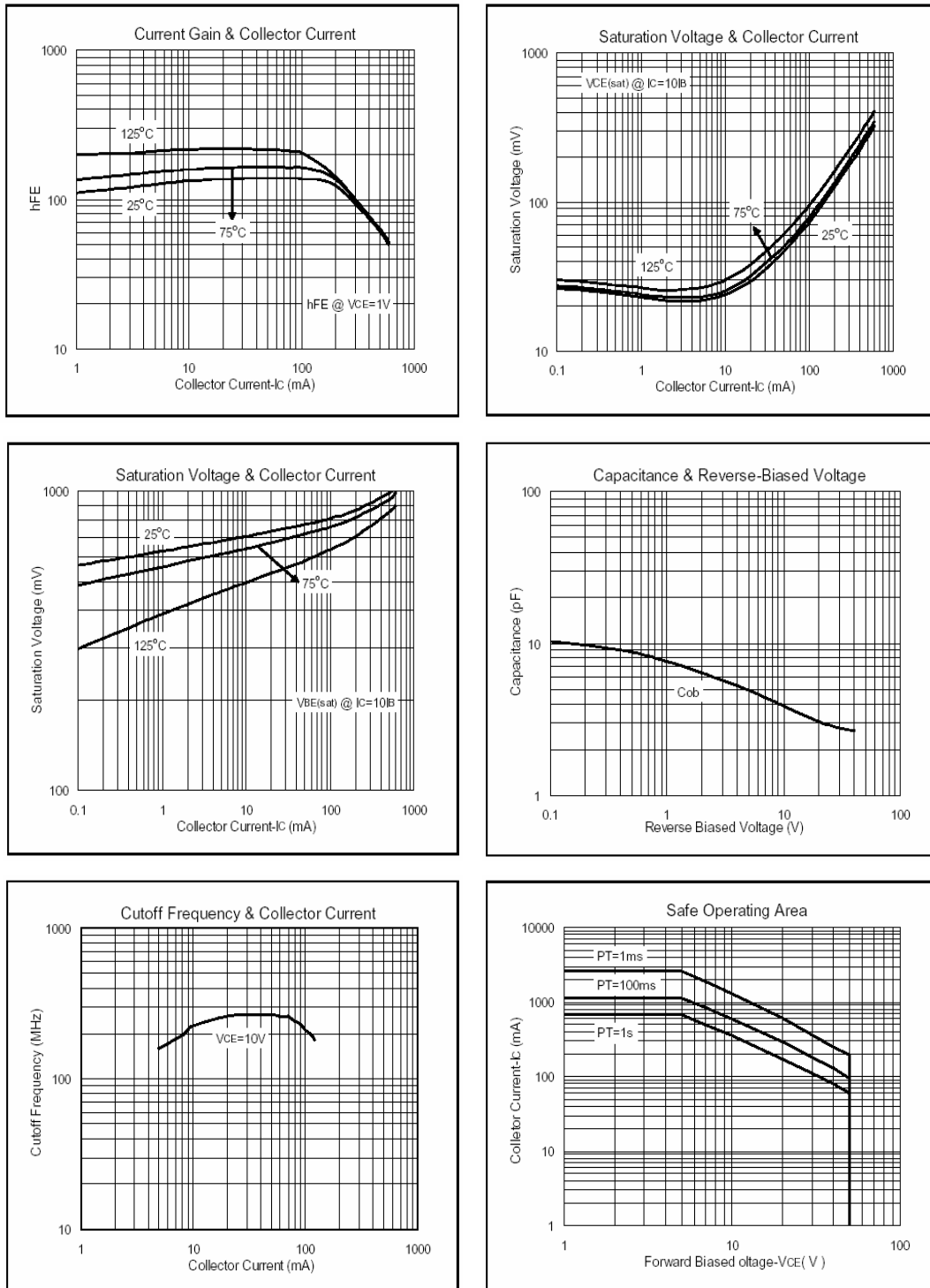
Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	60	-	-	V	IC=100uA
BVCEO	40	-	-	V	IC=1mA
BVEBO	5	-	-	V	IE=10uA
ICEX	-	-	100	nA	VCE=35V, VBE= 0.4V
*VCE(sat)1	-	-	400	mV	IC=150mA, IB=15mA
*VCE(sat)2	-	-	750	mV	IC=500mA, IB=50mA
*VBE(sat)1	750	-	950	mV	IC=150mA, IB=15mA
*VBE(sat)2	-	-	1.2	V	IC=500mA, IB=50mA
*hFE1	20	-	-		VCE=1V, IC=0.1mA
*hFE2	40	-	-		VCE=1V, IC=1mA
*hFE3	80	-	-		VCE=1V, IC=10mA
*hFE4	100	-	300		VCE=1V, IC=150mA
*hFE5	40	-	-		VCE=2V, IC=500mA
fT	250	-	-	MHz	VCE=10V, IC=20mA, f=100MHz
Cob	-	-	6.5	pF	VCB=5V, f=1MHz

Classification Of hFE4

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

Rank	A	B
Range	100-210	190-300

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