

# GTM CORPORATION

ISSUED DATE :2005/03/04  
REVISED DATE :

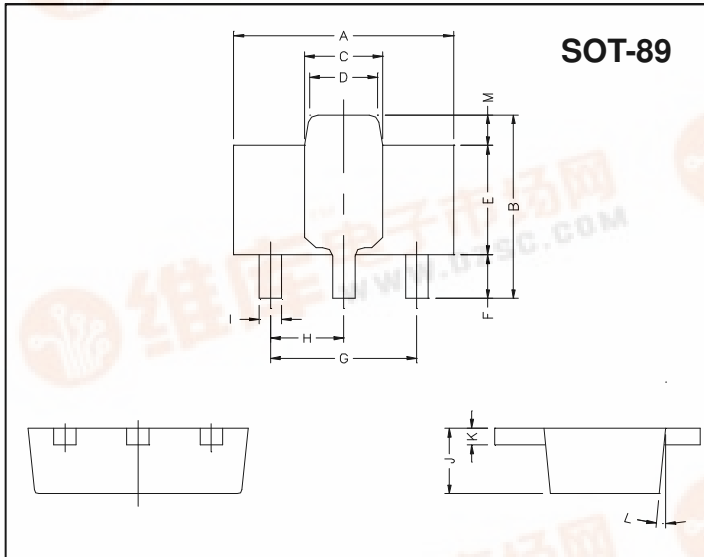
## GMSD1664

### NPN EPITAXIAL PLANAR TRANSISTOR

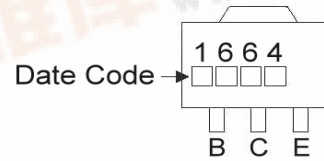
#### Description

The GMSD1664 is designed for general purpose amplifier applications.

#### 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	VCBO	40	V
Collector to Emitter Voltage	VCEO	32	V
Emitter to Base Voltage	VEBO	5	V
Collector Current at Ta=25°C	IC	1	A
Total Power Dissipation at Ta=25°C	PD	500	mW

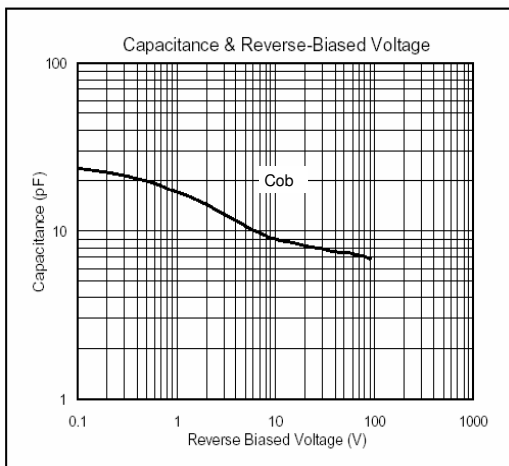
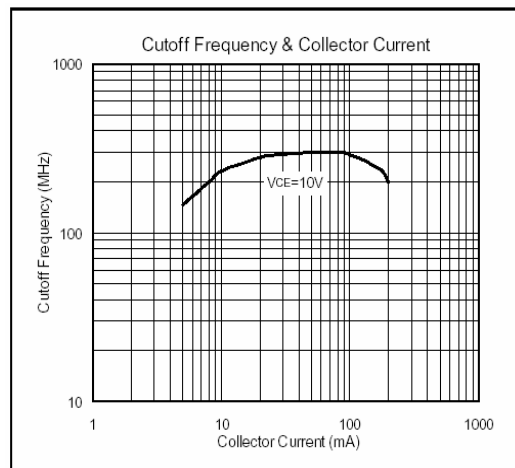
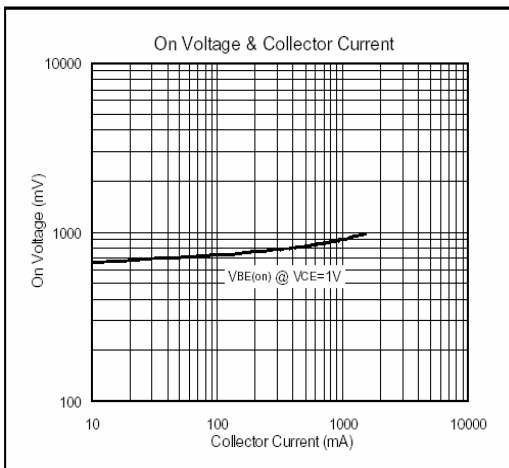
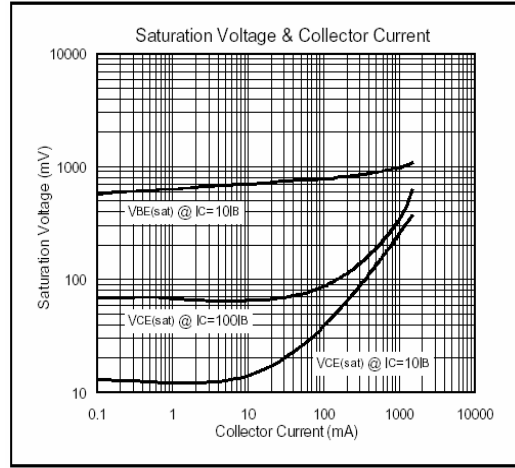
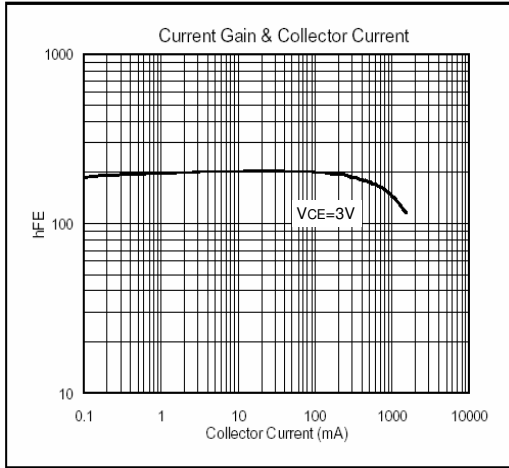
#### Characteristics at Ta = 25°C

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BV <sub>CB0</sub>	40	-	-	V	IC=50uA
BV <sub>CE0</sub>	32	-	-	V	IC=1mA
BV <sub>EB0</sub>	5	-	-	V	IE=50uA
IC <sub>B0</sub>	-	-	500	nA	VCE=20V
IE <sub>B0</sub>	-	-	500	nA	VEB=4V
V <sub>CE(sat)</sub>	-	0.15	0.4	V	IC=500mA, IB=50mA
h <sub>FE</sub>	82	-	390		VCE=3V, IC=100mA
f <sub>T</sub>	-	150	-	MHz	VCE=5V, IE=-50mA, f=100MHz
C <sub>ob</sub>	-	9	-	pF	VCB=10V, IE=0mA, f=1MHz

#### Classification Of hFE

Rank	P	Q	R
hFE	82-180	120-270	180-390

## Characteristics Curve



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