

GSMBT4401

NPN EPITAXIAL PLANAR TRANSISTOR

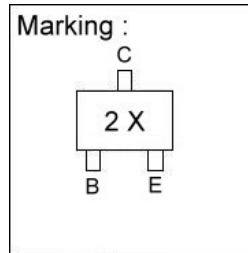
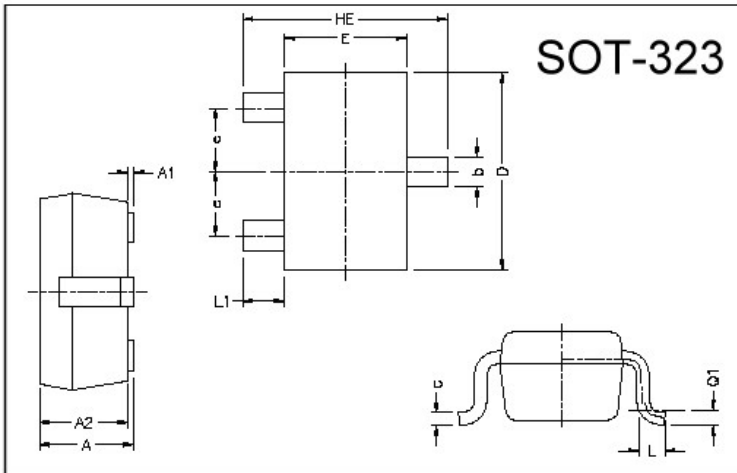
Description

The GSMBT4401 is designed for general purpose switching and amplifier applications.

Features

- Complementary to GSMBT4403
- High DC Current Gain: 100-300 at 150mA

Package Dimensions



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	0.80	1.10	L1	0.42 REF.	
A1	0	0.10	L	0.15	0.35
A2	0.80	1.00	b	0.25	0.40
D	1.80	2.20	c	0.10	0.25
E	1.15	1.35	e	0.65 REF.	
HE	1.80	2.40	Q1	0.15 BSC.	

Absolute Maximum Ratings at Ta = 25°C

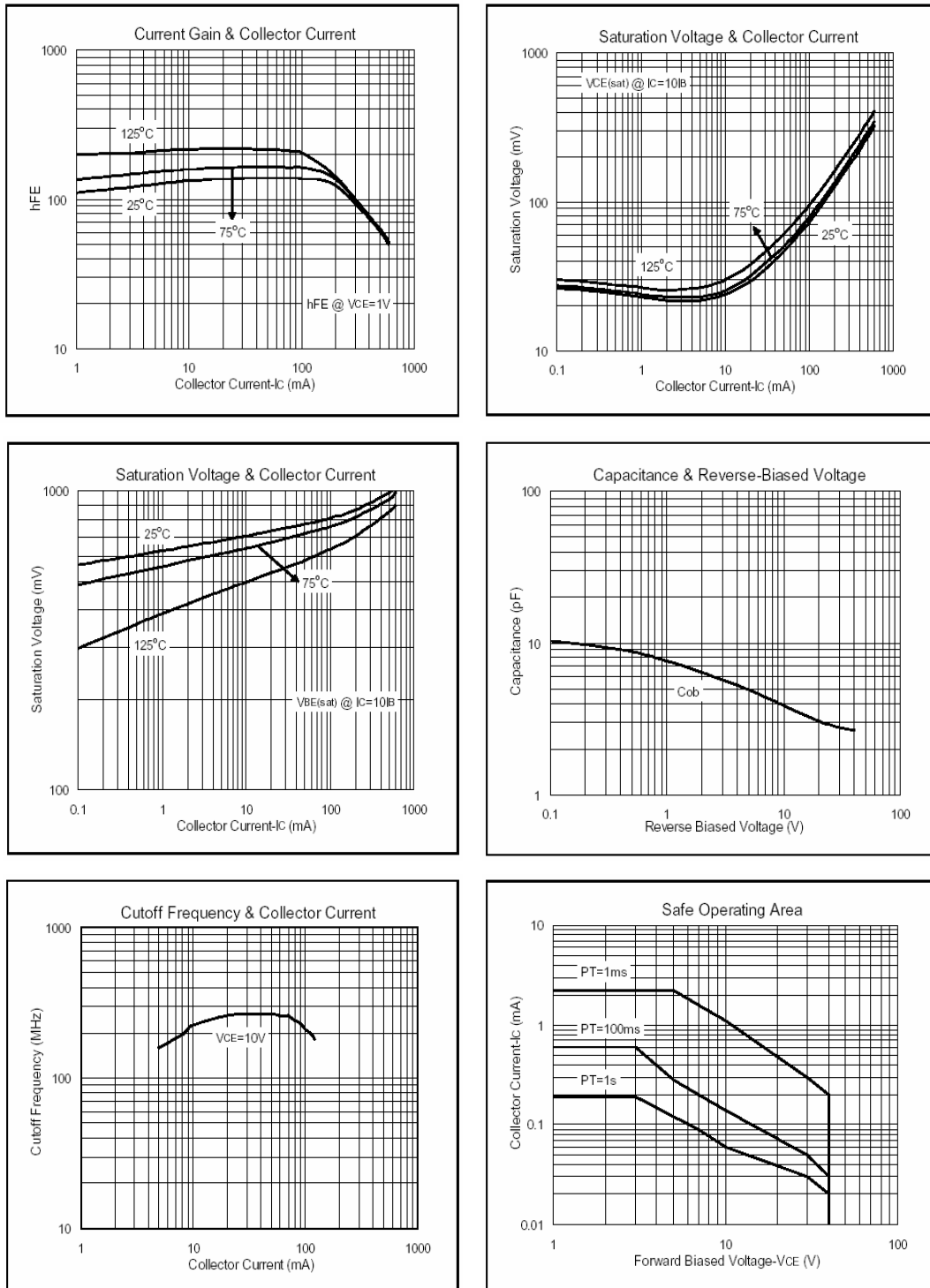
Parameter	Symbol	Ratings	Unit
Junction Temperature	T _j	+150	°C
Storage Temperature	T _{stg}	-55 ~ +150	°C
Collector to Base Voltage at Ta=25°C	V _{CB0}	60	V
Collector to Emitter Voltage at Ta=25°C	V _{CEO}	40	V
Emitter to Base Voltage at Ta=25°C	V _{EBO}	6	V
Collector Current at Ta=25°C	I _C	600	mA
Total Power Dissipation at Ta=25°C	P _D	250	mW

Characteristics at Ta = 25°C

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
V _{CB0}	60	-	-	V	I _C =100μA
V _{CEO}	40	-	-	V	I _C =1mA
V _{EBO}	6	-	-	V	I _E =10μA
ICEX	-	-	100	nA	V _{CE} =35V, V _{BE} = 0.4V
*V _{CE(sat)1}	-	-	400	mV	I _C =150mA, I _B =15mA
*V _{CE(sat)2}	-	-	750	mV	I _C =500mA, I _B =50mA
*V _{BE(sat)1}	-	-	950	mV	I _C =150mA, I _B =15mA
*V _{BE(sat)2}	-	-	1.2	V	I _C =500mA, I _B =50mA
*h _{FE1}	20	-	-		V _{CE} =1V, I _C =0.1mA
*h _{FE2}	40	-	-		V _{CE} =1V, I _C =1mA
*h _{FE3}	80	-	-		V _{CE} =1V, I _C =10mA
*h _{FE4}	100	-	300		V _{CE} =1V, I _C =150mA
*h _{FE5}	40	-	-		V _{CE} =2V, I _C =500mA
f _T	250	-	-	MHz	V _{CE} =10V, I _C =20mA, f=100MHz
C _{ob}	-	-	6.5	pF	V _{CB} =5V, f=1MHz

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

Characteristics Curve



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