

GSMBT4401

NPN EPITAXIAL PLANAR TRANSISTOR

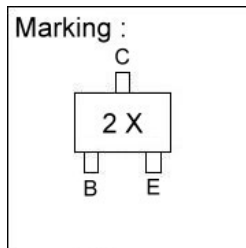
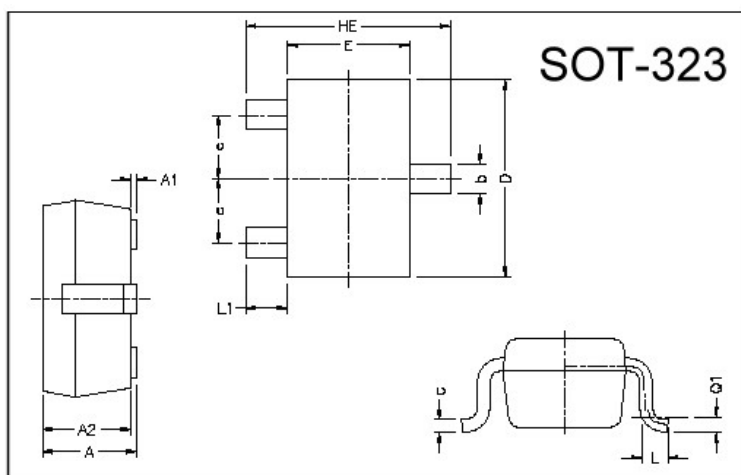
Description

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

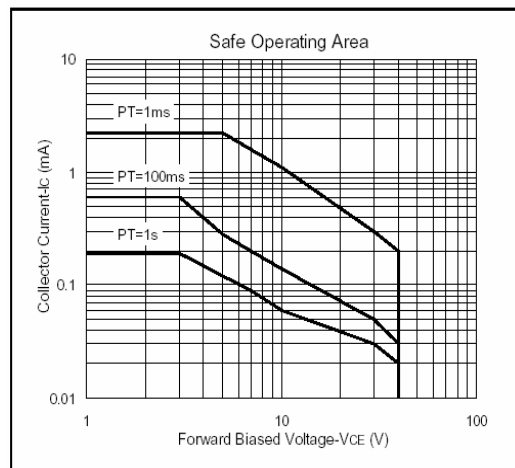
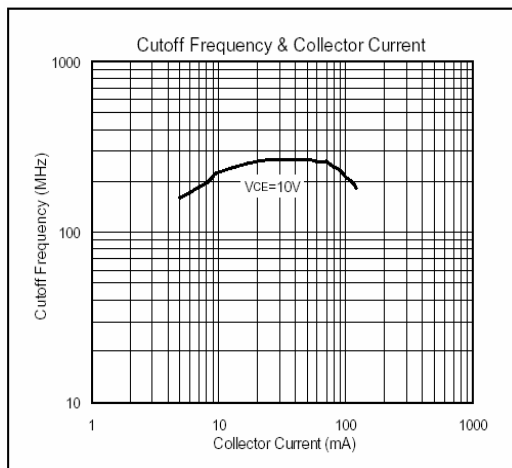
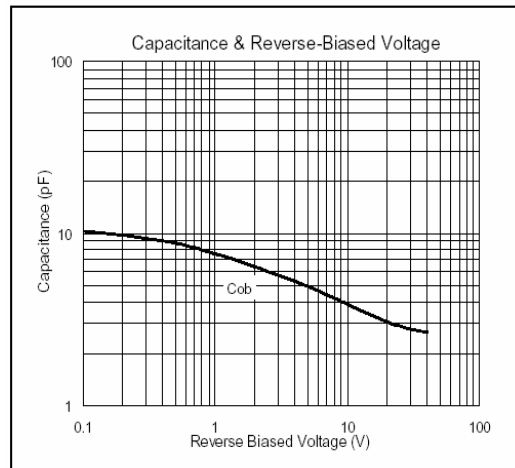
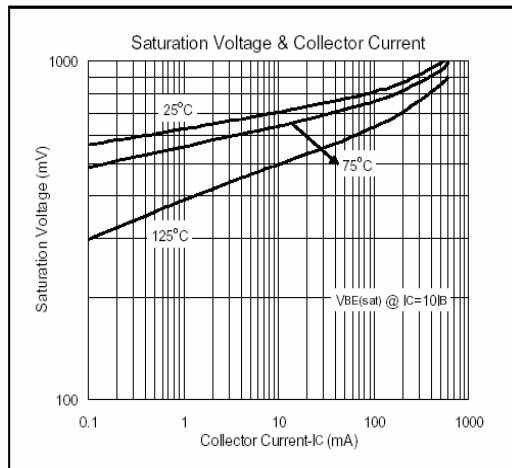
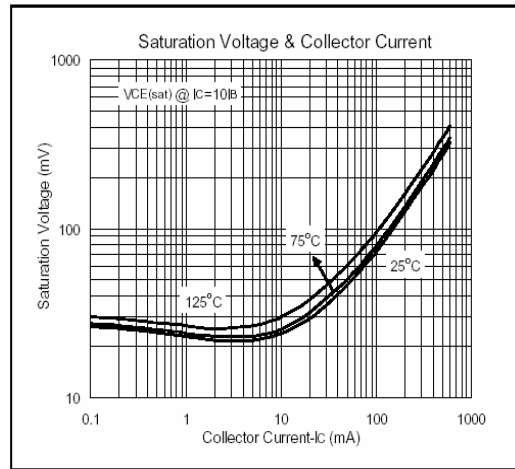
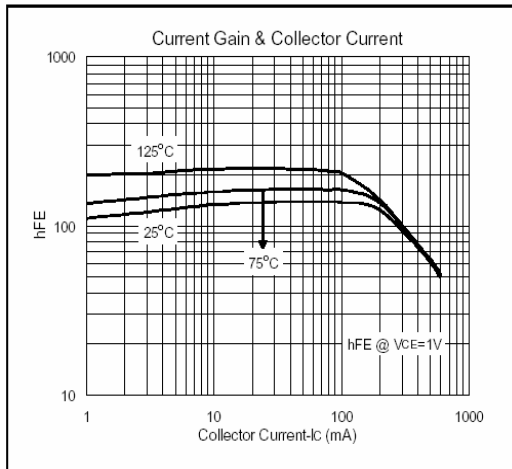
Parameter	Symbol	Ratings	Unit
Junction Temperature	Tj	+150	°C
Storage Temperature	Tstg	-55 ~ +150	°C
Collector to Base Voltage at Ta=25°C	VCBO	60	V
Collector to Emitter Voltage at Ta=25°C	VCEO	40	V
Emitter to Base Voltage at Ta=25°C	VEBO	6	V
Collector Current at Ta=25°C	IC	600	mA
Total Power Dissipation at Ta=25°C	PD	250	mW

Characteristics at Ta = 25°C

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	60	-	-	V	IC=100uA
BVCEO	40	-	-	V	IC=1mA
BVEBO	6	-	-	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	-	-	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

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

Characteristics Curve



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