GSMBT5401 PNP EPITAXIAL PLANAR TRANSISTOR

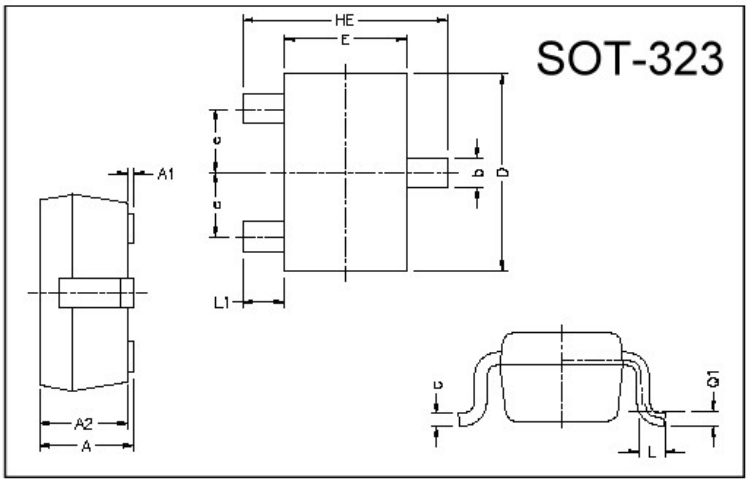
Description

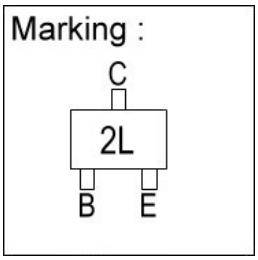
The GSMBT5401 is designed for general purpose applications requiring high breakdown voltage.

Features

- High Collector-Emitter Breakdown Voltage (BV_{CEO}=-150V @ IC=-1mA)
- Complementary to GSMBT5551

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℃

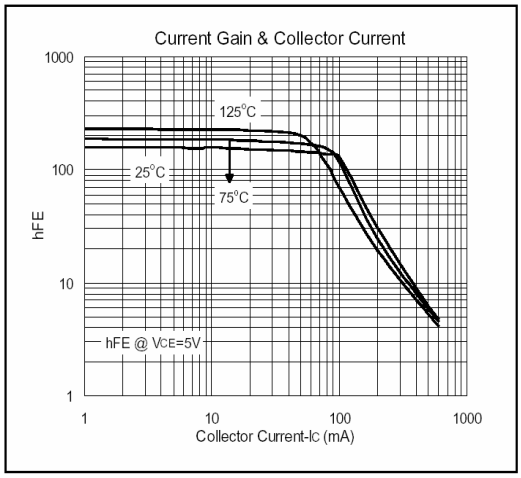
Parameter	Symbol	Ratings	Unit
Junction Temperature	Tj	+150	℃
Storage Temperature	Tstg	-55~+150	℃
Collector to Base Voltage	V_{CBO}	-160	V
Collector to Emitter Voltage	V_{CEO}	-150	V
Emitter to Base Voltage	V_{EBO}	-5	V
Collector Current	I_C	-600	mA
Total Power Dissipation	P_D	225	mW

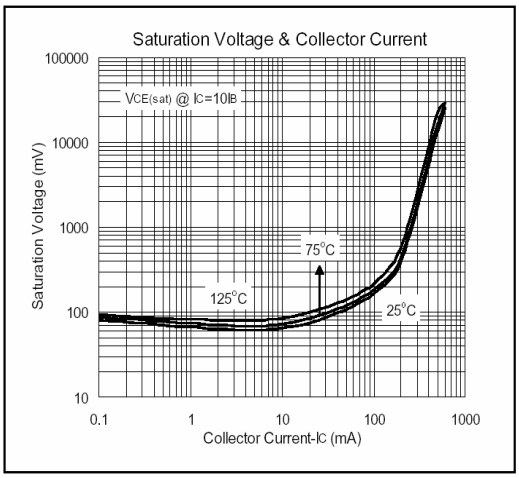
Electrical Characteristics (Ta = 25℃)

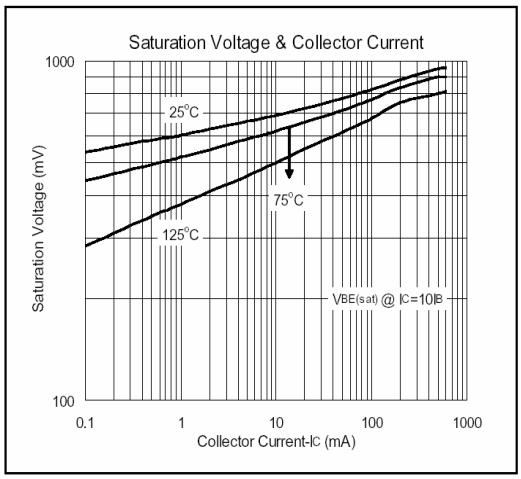
Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BV_{CBO}	-160	-	-	V	I_C=-100uA , I_E=0
BV_{CEO}	-150	-	-	V	I_C=-1mA, I_B=0
BV_{EBO}	-5	-	-	V	I_E=-10uA ,I_C=0
I_{CBO}	-	-	-50	nA	V_{CB}=-120V, I_E=0
*$V_{CE(sat)}$1	-	-	-200	mV	I_C=-10mA, I_B=-1mA
*$V_{CE(sat)}$2	-	-	-500	mV	I_C=-50mA, I_B=-5mA
*$V_{BE(sat)}$1	-	-	-1	V	I_C=-10mA, I_B=-1mA
*$V_{BE(sat)}$2	-	-	-1	V	I_C=-50mA, I_B=-5mA
*h_{FE}1	50	-	-		V_{CE}=-5V, I_C=-1mA
*h_{FE}2	60	-	240		V_{CE}=-5V, I_C=-10mA
*h_{FE}3	50	-	-		V_{CE}=-5V, I_C=-50mA
fT	100	-	300	MHz	V_{CE}=-10V, I_C=-10mA, f=100MHz
Cob	-	-	6	pF	V_{CB}=-10V, I_E=0, f=1MHz

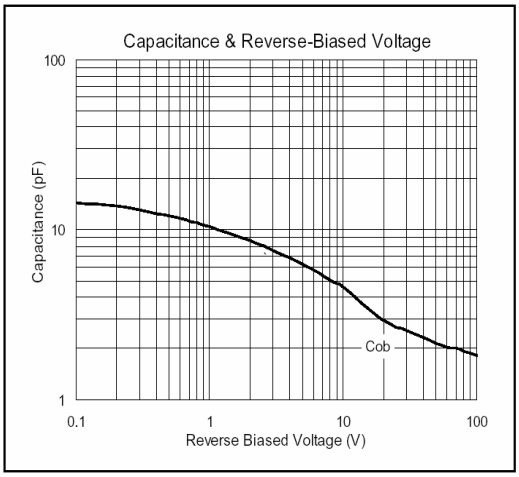
*** Pulse Test: Pulse Width≦380μs, Duty Cycle≦2%**

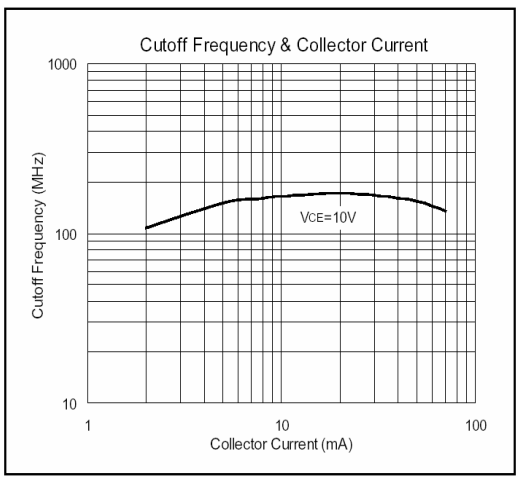
Characteristics Curve











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