

## GSMBT5401 PNP EPITAXIAL PLANAR TRANSISTOR

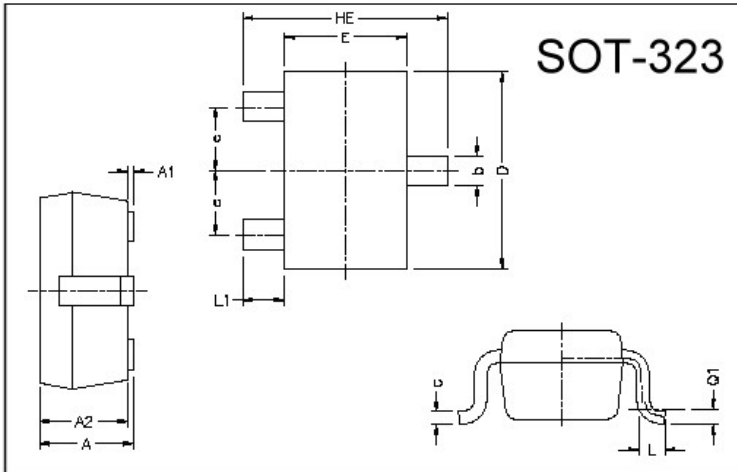
### Description

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

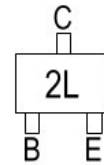
### Features

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

### Package Dimensions



Marking :



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 $T_a = 25^\circ C$

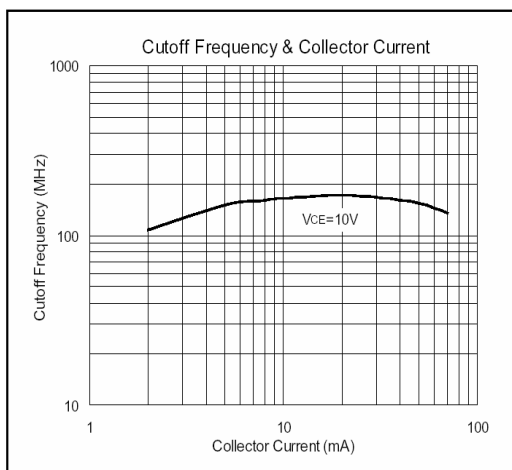
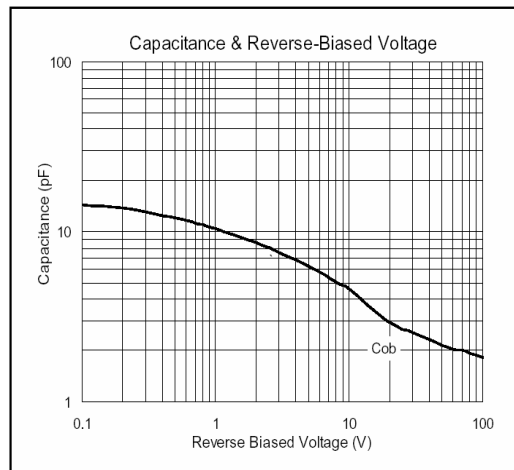
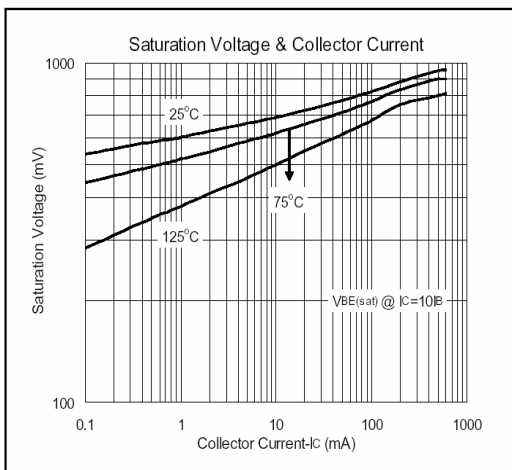
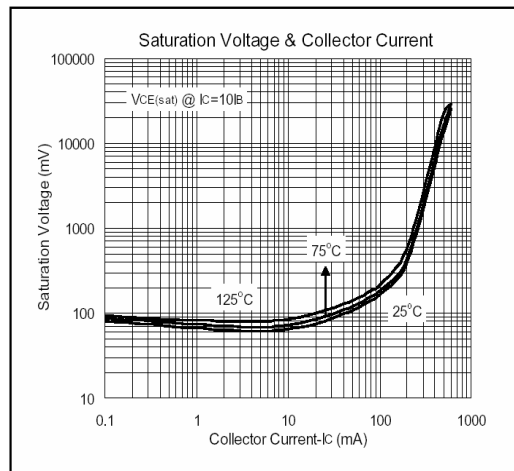
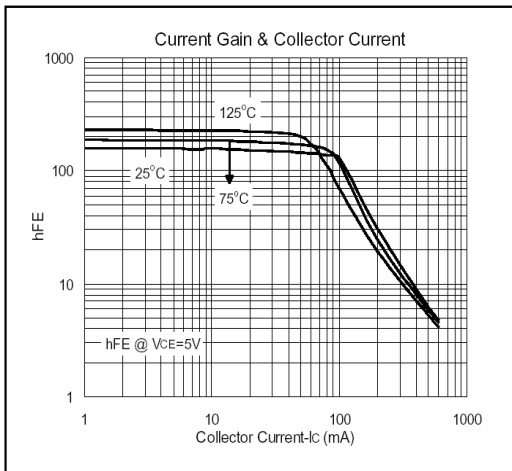
Parameter	Symbol	Ratings	Unit
Junction Temperature	$T_j$	+150	$^\circ C$
Storage Temperature	$T_{stg}$	-55~+150	$^\circ C$
Collector to Base Voltage	$V_{CBO}$	-160	V
Collector to Emitter Voltage	$V_{CEO}$	-150	V
Emitter to Base Voltage	$V_{EBO}$	-5	V
Collector Current	$I_C$	-600	mA
Total Power Dissipation	$P_D$	225	mW

### Electrical Characteristics ( $T_a = 25^\circ C$ )

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
$BV_{CBO}$	-160	-	-	V	$I_C=-100\mu A, I_E=0$
$BV_{CEO}$	-150	-	-	V	$I_C=-1mA, I_B=0$
$BV_{EBO}$	-5	-	-	V	$I_E=-10\mu A, I_C=0$
$I_{CBO}$	-	-	-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	$I_C=-50mA, I_B=-5mA$
* $h_{FE1}$	50	-	-		$V_{CE}=-5V, I_C=-1mA$
* $h_{FE2}$	60	-	240		$V_{CE}=-5V, I_C=-10mA$
* $h_{FE3}$	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  $\leq 380\mu s$ , Duty Cycle  $\leq 2\%$

## Characteristics Curve



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