

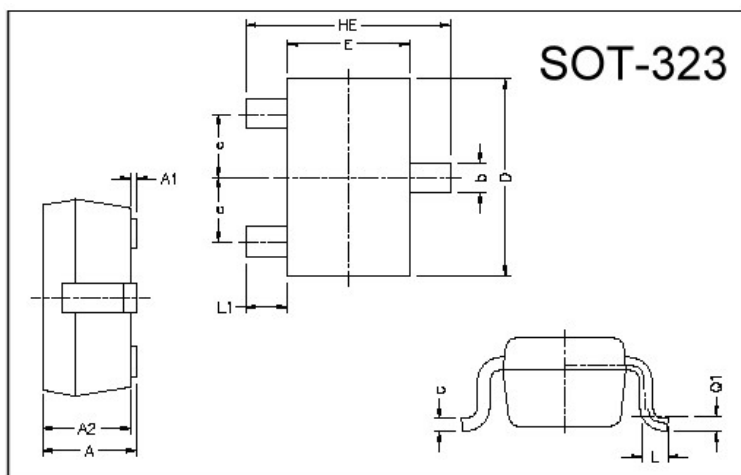
G SMBTA42

NPN EPITAXIAL PLANAR TRANSISTOR

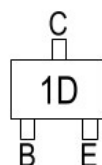
Description

The GSMBTA42 is designed for high voltage transistor.

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 Ta = 25°C

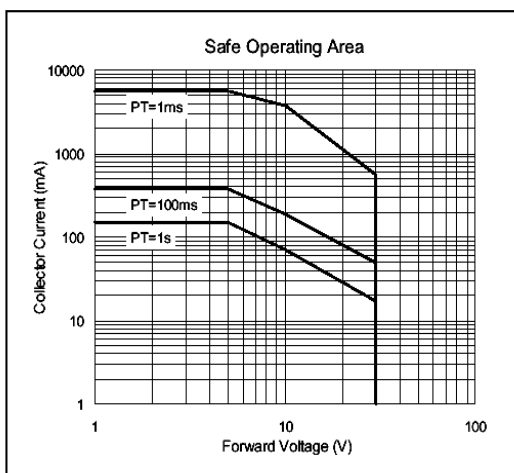
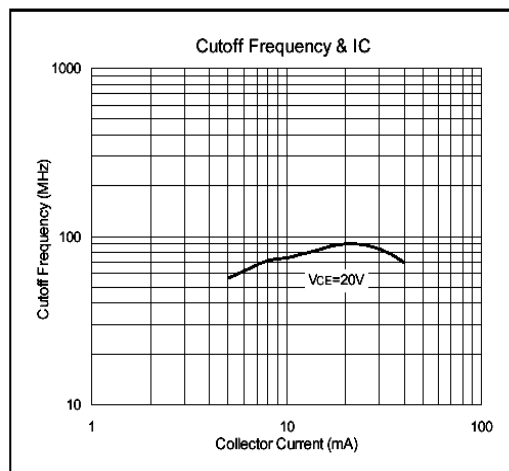
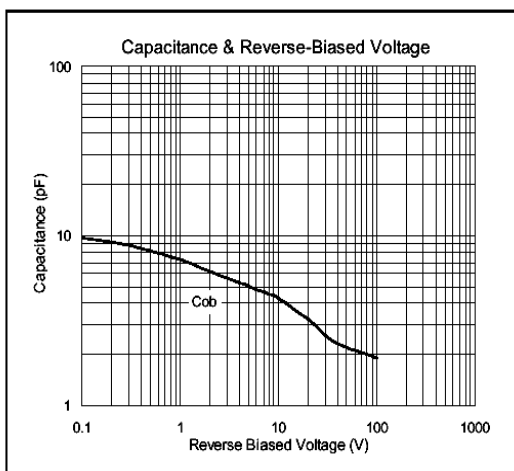
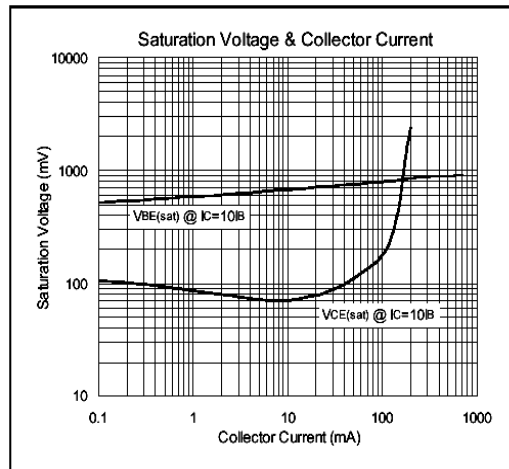
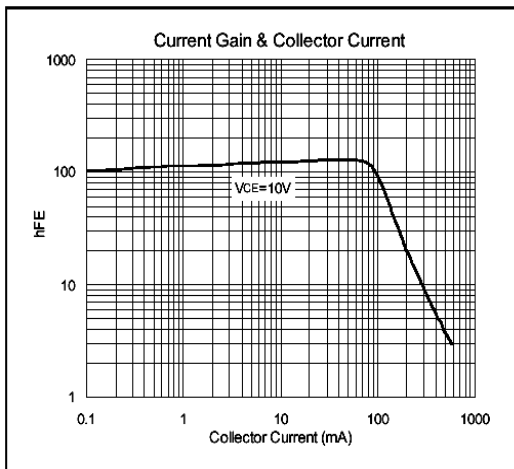
Parameter	Symbol	Ratings	Unit
Junction Temperature	T _j	+150	°C
Storage Temperature	T _{stg}	-55~+150	°C
Collector to Base Voltage	V _{CB0}	300	V
Collector to Emitter Voltage	V _{CEO}	300	V
Emitter to Base Voltage	V _{EBO}	6	V
Collector Current	I _c	500	mA
Total Power Dissipation	P _d	350	mW

Electrical Characteristics (Ta = 25°C, unless otherwise noted)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BV _{CB0}	300	-	-	V	I _c =100μA, I _E =0
BV _{CEO}	300	-	-	V	I _c =1mA, I _B =0
BV _{EBO}	6	-	-	V	I _E =100μA, I _c =0
I _{CB0}	-	-	100	nA	V _{CB} =200V, I _E =0
I _{EBO}	-	-	100	nA	V _{EB} =6V, I _c =0
*V _{CE(sat)}	-	-	500	mV	I _c =20mA, I _B =2mA
*V _{BE(sat)}	-	-	900	mV	I _c =20mA, I _B =2mA
*h _{FE1}	25	-	-		V _{CE} =10V, I _c =1mA
*h _{FE2}	40	-	-		V _{CE} =10V, I _c =10mA
*h _{FE3}	40	-	-		V _{CE} =10V, I _c =30mA
f _T	50	-	-	MHz	V _{CE} =20V, I _c =10mA, f=100MHz
C _{ob}	-	-	3	pF	V _{CB} =20V, I _E =0, f=1MHz

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

Characteristics Curve



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