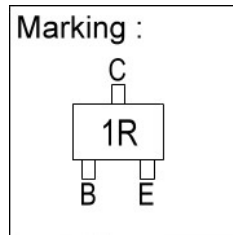
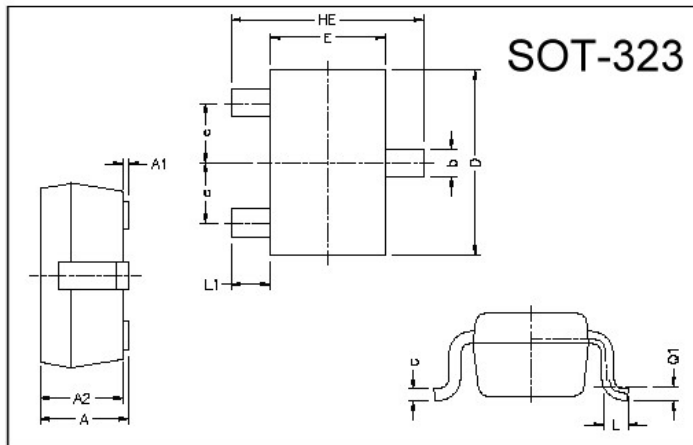


## GSMBT5089 NPN EPITAXIAL PLANAR TRANSISTOR

### Description

The GSMBT5089 is designed for low noise, high gain and general purpose amplifier applications.

### 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

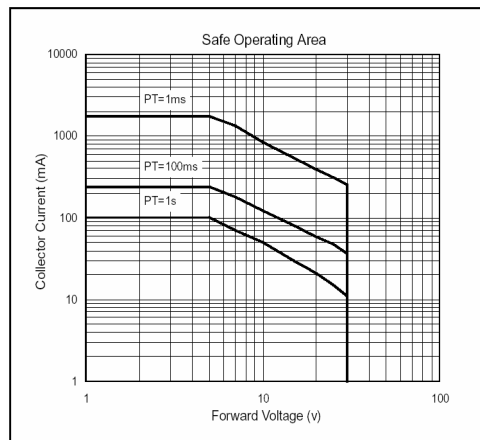
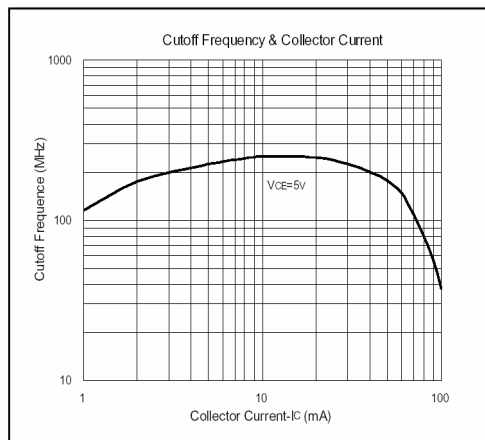
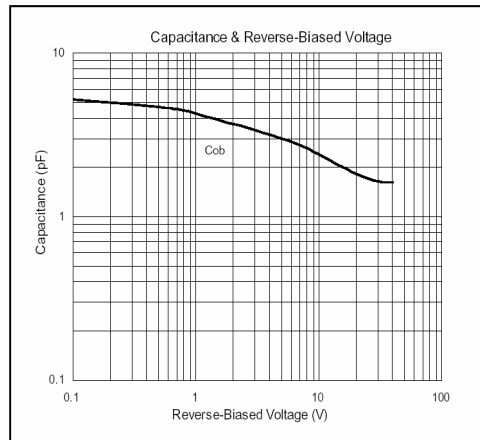
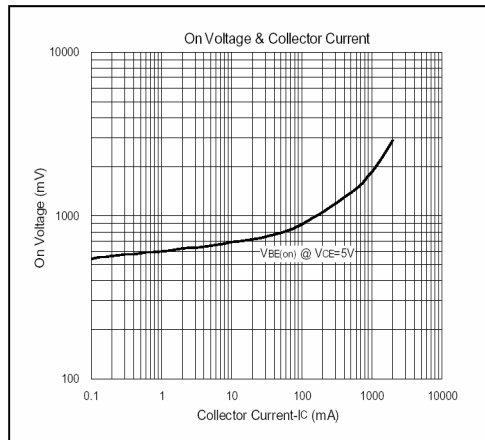
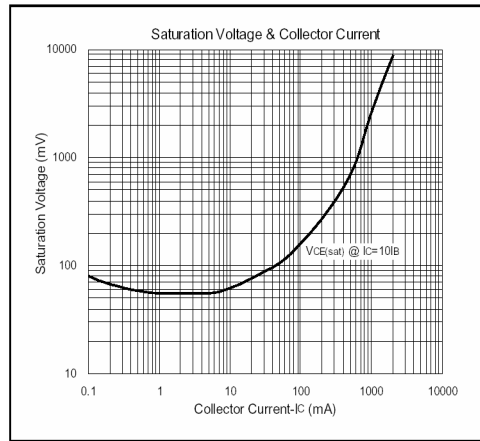
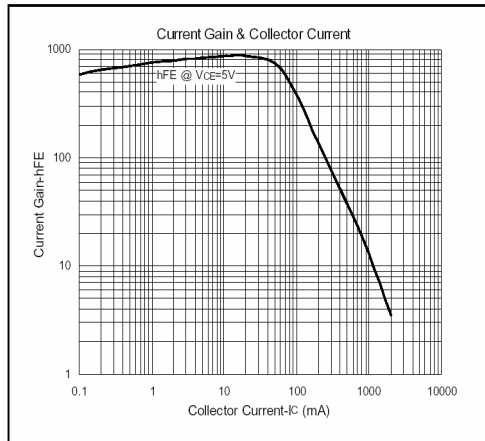
Parameter	Symbol	Ratings	Unit
Junction Temperature	Tj	+150	°C
Storage Temperature	Tstg	-55~+150	°C
Collector to Base Voltage	Vcbo	30	V
Collector to Emitter Voltage	Vceo	25	V
Emitter to Base Voltage	Vebo	4.5	V
Collector Current	Ic	50	mA
Total Power Dissipation	Pd	225	mW

### Electrical Characteristics (Ta = 25°C)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVcbo	30	-	-	V	Ic=100uA, IE=0
BVceo	25	-	-	V	Ic=1mA, IB=0
BVebo	4.5	-	-	V	IE=10uA, Ic=0
Icbo	-	-	50	nA	Vcb=15V, IE=0
IEBO	-	-	100	nA	VEB=4.5V, Ic=0
*VCE(sat)	-	-	500	mV	Ic=10mA, IB=1mA
*VBE(sat)	-	-	800	mV	Ic=10mA, IB=1mA
*hFE1	400	-	1200		VCE=5V, Ic=0.1mA
*hFE2	450	-	-		VCE=5V, Ic=1mA
*hFE3	400	-	-		VCE=5V, Ic=10mA
fT	50	-	-	MHz	VCE=5V, Ic=0.5mA, f=20MHz
Cob	-	-	4.0	pF	Vcb=5V, IE=0, f=1MHz

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

## Characteristics Curve



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