

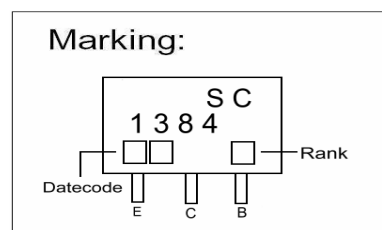
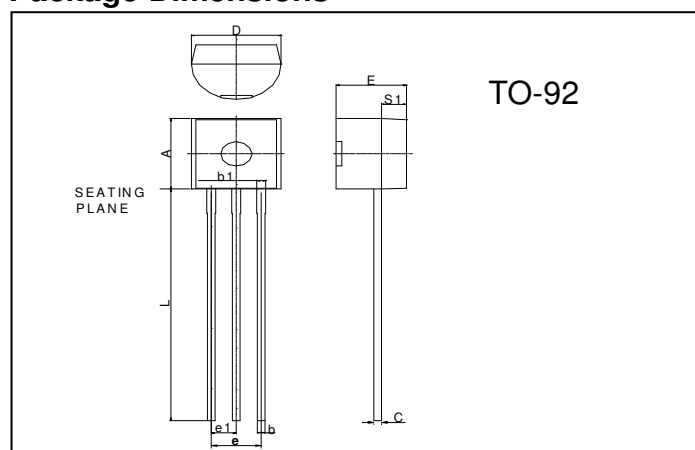
GSC1384**NPN EPITAXIAL PLANAR TRANSISTOR****Description**

The GSC1384 is designed for power amplifier and driver.

Features

*Low collector to emitter saturation voltage $V_{CE(sat)}$.

*Complementary pair with GSA684

Package Dimensions

REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	4.45	4.7	D	4.44	4.7
S1	1.02	-	E	3.30	3.81
b	0.36	0.51	L	12.70	-
b1	0.36	0.76	e1	1.150	1.390
C	0.36	0.51	e	2.42	2.66

Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$, unless otherwise specified)

Parameter		Ratings	Unit
Collector to Base Voltage	V_{CBO}	60	V
Collector to Emitter Voltage	V_{CEO}	50	V
Emitter to Base Voltage	V_{EBO}	5	V
Collect Current(DC)	I_C	1	A
Collect Current*(Pulse)	I_{CP}	1.5	A
Junction Temperature	T_j	+150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 ~ +150	$^\circ\text{C}$
Total Power Dissipation	PD	1	W

Electrical Characteristics ($T_a = 25^\circ\text{C}$, unless otherwise specified)

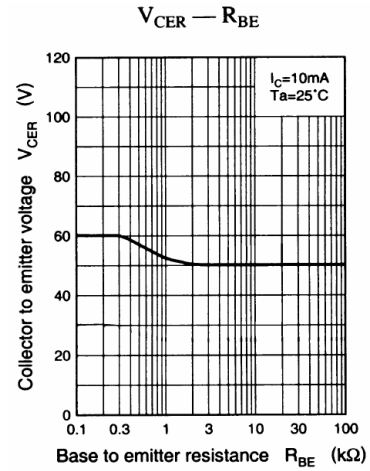
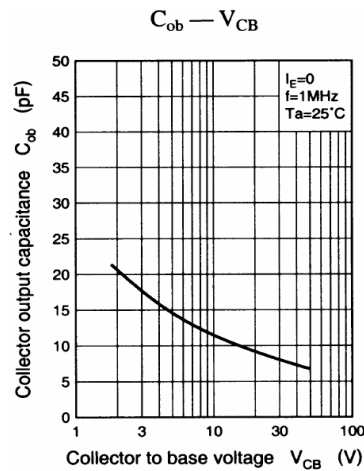
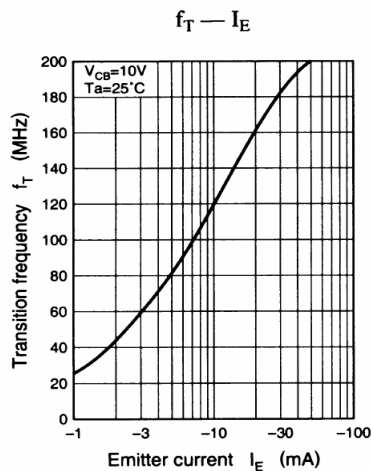
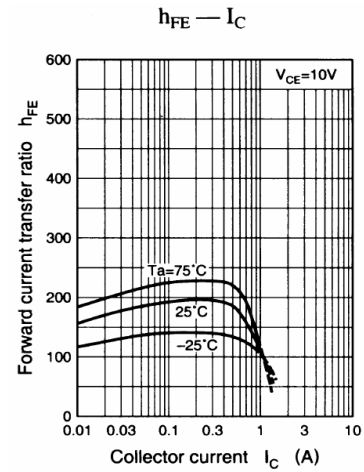
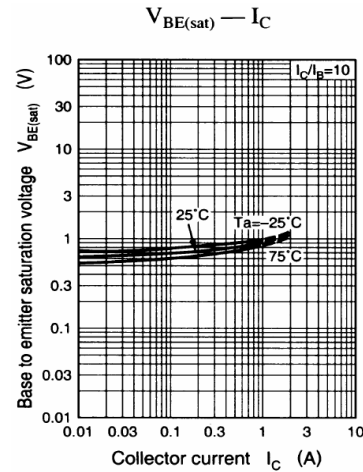
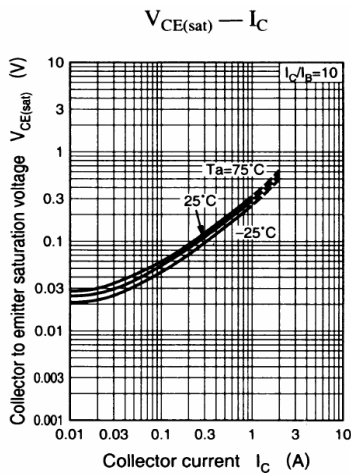
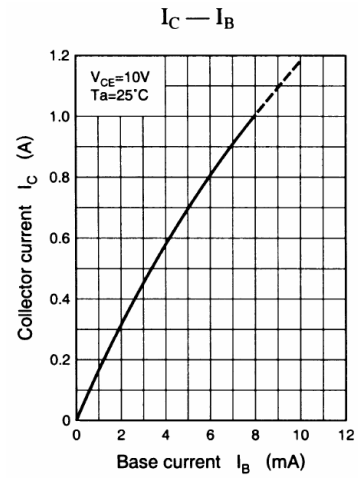
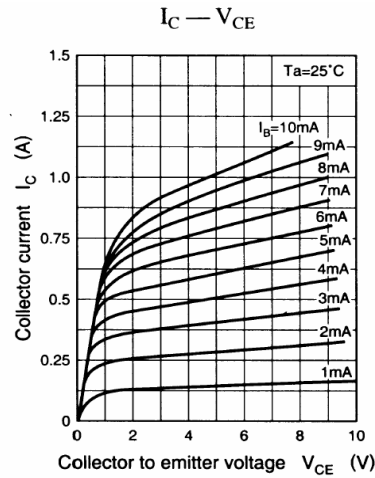
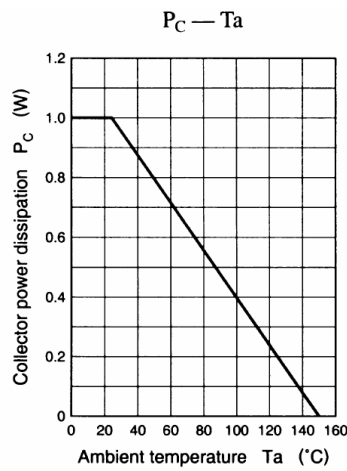
Symbol	Min.	Typ.	Max.	Unit	Test Conditions
V_{CBO}	60	-	-	V	$I_C=10\mu\text{A}, I_E=0$
V_{CEO}	50	-	-	V	$I_C=2\text{mA}, I_B=0$
V_{EBO}	5	-	-	V	$I_E=10\mu\text{A}, I_C=0$
I_{CBO}	-	-	0.1	μA	$V_{CB}=20\text{V}, I_E=0$
$V_{CE(sat)}$	-	200	400	mV	$I_C=0.5\text{A}, I_B=50\text{mA}(\text{note})$
$V_{BE(sat)}$	-	0.85	1.2	V	$I_C=0.5\text{A}, I_B=50\text{mA}(\text{note})$
* h_{FE1}	85	160	340		$V_{CE}=10\text{V}, I_C=500\text{mA}(\text{note})$
* h_{FE2}	50	100	-		$V_{CE}=5\text{V}, I_C=1\text{A}(\text{note})$
fT	-	200	-	MHz	$V_{CE}=10\text{V}, I_B=-50\text{mA}, f=200\text{MHz}$
Cob	-	11	20	pF	$V_{CB}=10\text{V}, I_E=0, f=1\text{MHz}$

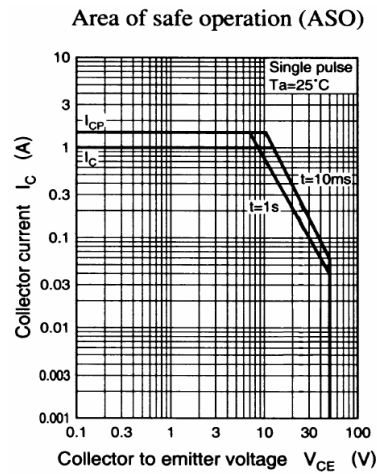
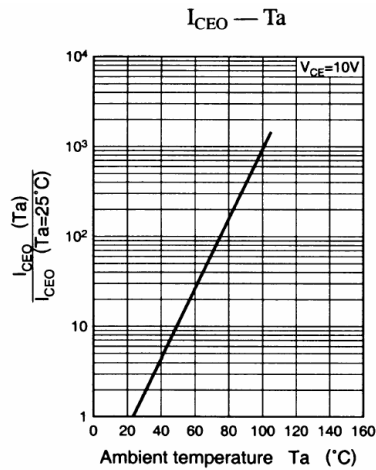
Note: Pulse measurement

Classification Of h_{FE1}

Rank	Q	R	S
Range	85-170	120-240	170-340

Characteristics Curve



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