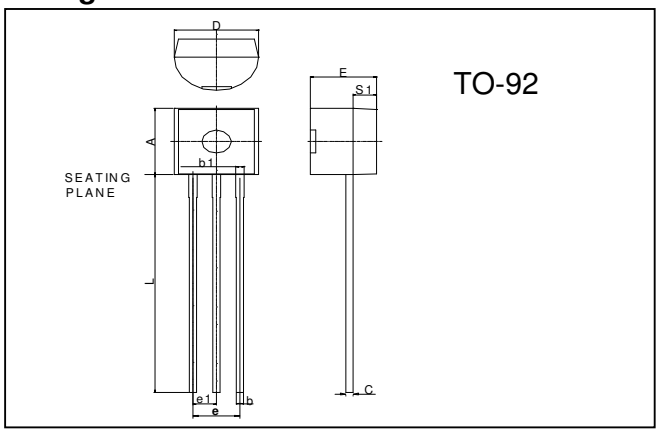
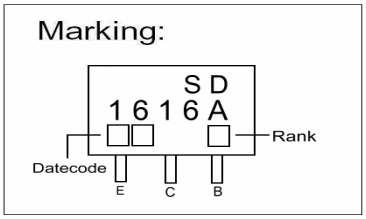
GSD1616A NPN EPITAXIAL PLANAR TRANSISTOR

Description

The GSD1616A is designed for audio frequency power amplifier and medium speed switching.

Package Dimensions





REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	4.45	4.7	D	4.44	4.7
S_1	1.02	-	E	3.30	3.81
b	0.36	0.51	L	12.70	-
b_1	0.36	0.76	e1	1.150	1.390
C	0.36	0.51	e	2.42	2.66

Absolute Maximum Ratings Ta = 25℃

Parameter		Ratings	Unit
Collector to Base Voltage	VCBO	120	V
Collector to Emitter Voltage	VCEO	60	V
Emitter to Base Voltage	VEBO	6	V
Collect Current(DC)	IC	1	A
Collect Current*(Pulse)	IC	2	A
Junction Temperature	Tj	+150	℃
Storage Temperature Range	TSTG	-55 ~ +150	℃
Total Power Dissipation	PD	750	mW

Characteristics at Ta = 25℃

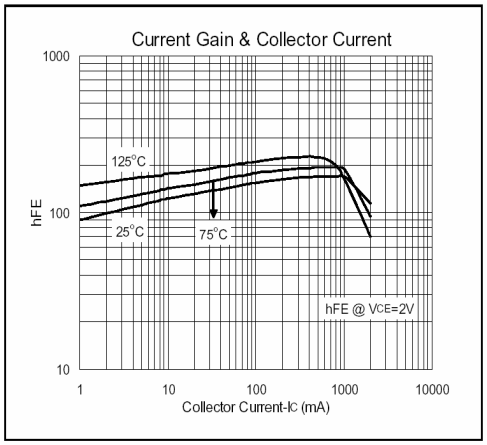
Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	120	-	-	V	IC=100uA
BVCEO	60	-	-	V	IC=1mA
BVEBO	6	-	-	V	IE=10uA
ICBO	-	-	100	nA	VBE=60V
IEBO	-		100	nA	VBE=6V
*VCE(sat)	-	150	300	mV	IC=1A,IB=50mA
*VBE(sat)	-	0.9	1.2	mV	IC=1A, IB=50mA
VBE(on)	600	640	700	mV	VCE=2V,IC=50mA
*hFE1	135	-	600		VCE=2V,IC=100mA
*hFE2	81	-	-		VCE=2V,IC=1A
fT	100	160	-	MHz	VCE=2V,IC=100mA
Cob	-	-	19	pF	VCB=10V ,IE=0,f=1MHz
ton	-	0.07	-	uS	VCE=10V,IC=100mA
ts	-	0.95	-	uS	IB1=-IB2=10mA
tf	-	0.07	-	uS	VBE(off)=2~-3V

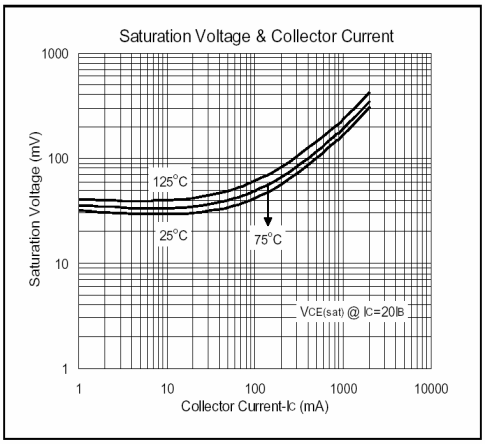
***Pulse Test: Pulse Width≦380us, Duty Cycle≦2%**

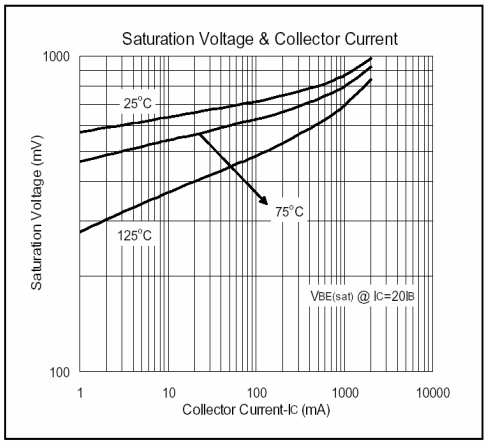
Classification of hFE1

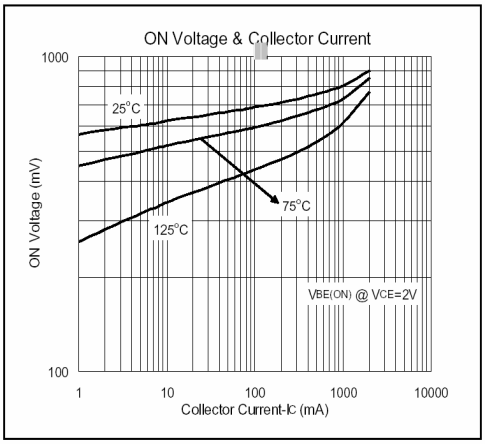
Rank	Y	G	L
Range	135-270	200-400	300-600

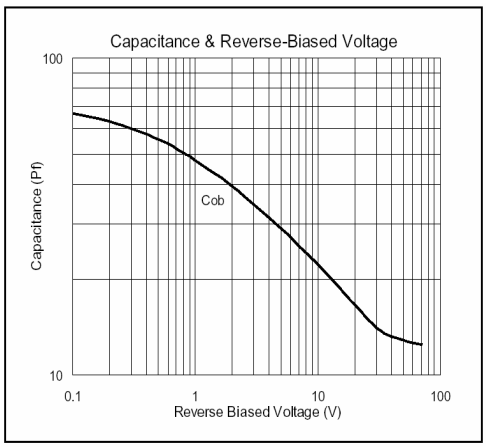
Characteristics Curve

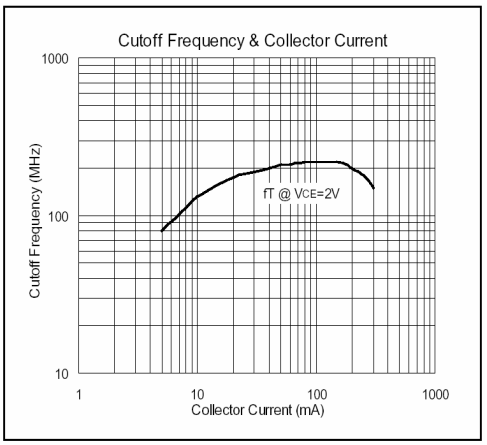


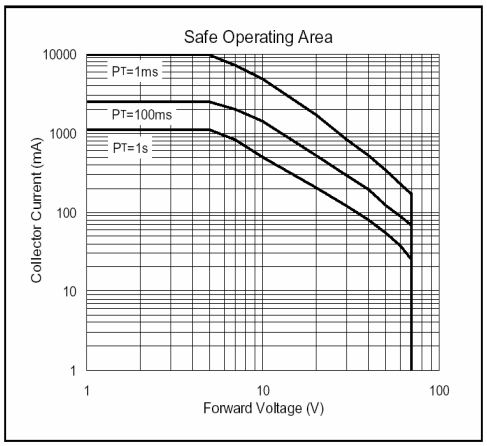


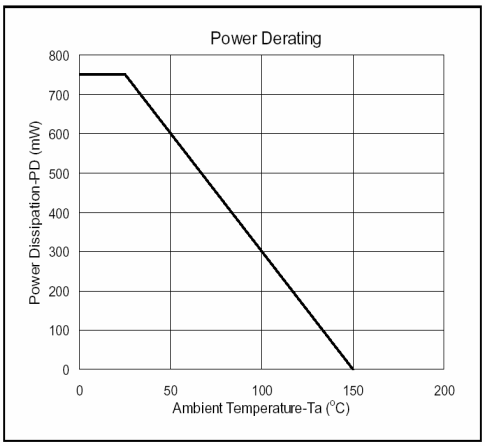












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