

GL9411A

PNP SILICON PLANAR MEDIUM POWER HIGH GAIN TRANSISTOR

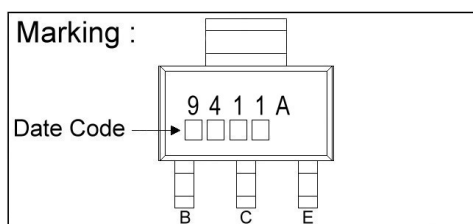
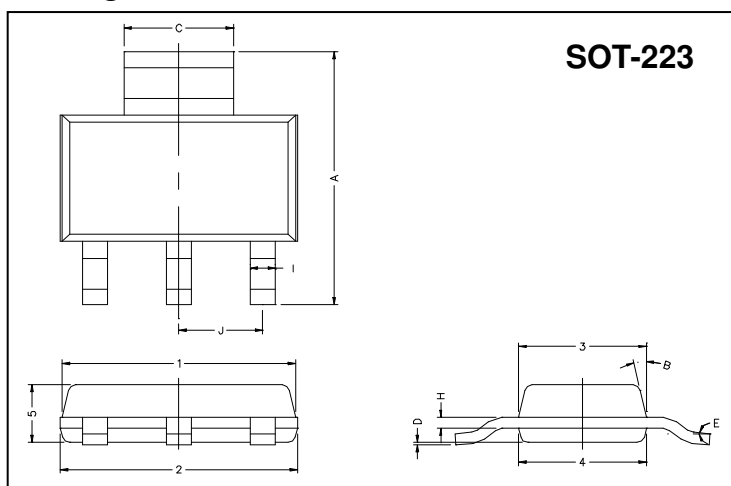
Description

The GL9411A is designed for general purpose switching and amplifier applications.

Features

- 4 Amps continuous current, up to 10Amps pulse current
- Low saturation voltages
- High Gain

Package Dimensions



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	6.70	7.30	B	13°TYP.	
C	2.90	3.10	J	2.30 REF.	
D	0.02	0.10	1	6.30	6.70
E	0°	10°	2	6.30	6.70
I	0.60	0.80	3	3.30	3.70
H	0.25	0.35	4	3.30	3.70
			5	1.40	1.80

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}	-30	V
Collector to Emitter Voltage	V _{CEO}	-25	V
Emitter to Base Voltage	V _{EBO}	-5	V
Collector Current (DC)	I _C	-4	A
Collector Current (Pulse)	I _{CM}	-10	A
Total Power Dissipation	P _D	2.5	W

*The power which can be dissipated assuming the device is mounted in typical manner on a PCB with copper equal to 2 inches x 2 inches.

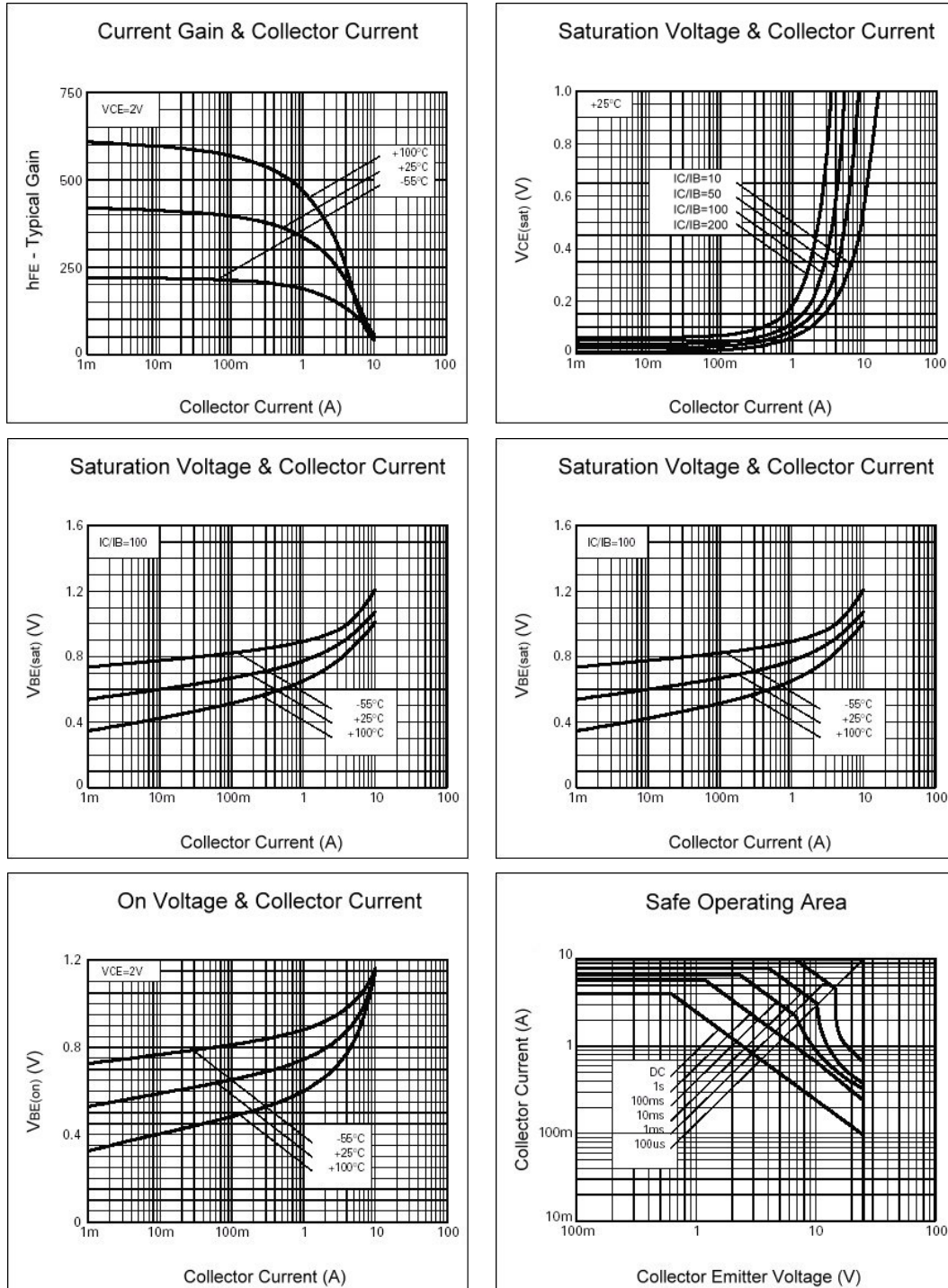
Electrical Characteristics (Ta = 25°C, unless otherwise stated)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BV _{CB0}	-30	-	-	V	I _C =-100uA, I _E =0
BV _{CES}	-25	-	-	V	I _C =-100uA
*BV _{CEO}	-25	-	-	V	I _C =-10mA, I _B =0
BV _{CEV}	-25	-	-	V	I _C =-100uA, V _{EB} =1V
BV _{EBO}	-5	-	-	V	I _E =-100uA, I _C =0
I _{CBO}	-	-	-100	nA	V _{CB} =-24V, I _E =0
I _{CES}	-	-	-100	nA	V _{CES} =-20V
I _{EBO}	-	-	-100	nA	V _{EB} =-4V, I _C =0
*V _{CE(sat)} 1	-	-	-80	mV	I _C =-100mA, I _B =-1mA
*V _{CE(sat)} 2	-	-	-170	mV	I _C =-500mA, I _B =-3mA
*V _{CE(sat)} 3	-	-	-240	mV	I _C =-1A, I _B =-7mA
*V _{CE(sat)} 4	-	-	-260	mV	I _C =-2A, I _B =-30mA
*V _{CE(sat)} 5	-	-	-350	mV	I _C =-4A, I _B =-140mA
*V _{BE(sat)}	-	-	-1.05	V	I _C =-4A, I _B =-140mA
*V _{BE(on)}	-	-	1.0	V	V _{CE} =-2V, I _C =-4A
*h _{FE1}	270	-	-		V _{CE} =-2V, I _C =-10mA
*h _{FE2}	250	-	800		V _{CE} =-2V, I _C =-0.5A
*h _{FE3}	195	-	-		V _{CE} =-2V, I _C =-2A
*h _{FE4}	115	-	-		V _{CE} =-2V, I _C =-5A

*hFE5	-	50	-		VCE=-2V, IC=-10A
fT	-	135	-	MHz	VCE=-10V, IC=-50mA, f=50MHz
Cob	-	50	-	pF	VCB=-10V, IE=0, f=1MHz
ton	-	150	-	ns	VCC=-10V, IC=-4A, IB1=-IB2=-40mA
toff	-	270	-		

*Measured under pulse condition. Pulse width=300μs, Duty Cycle≤2%

Characteristics Curve



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