# **GL9411A**

#### PNP SILICON PLANAR MEDIUM POWER HIGH GAIN TRANSISTOR

#### **Description**

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

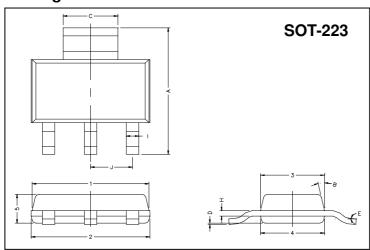
#### **Features**

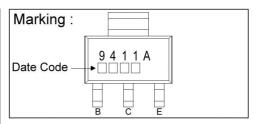
4 Amps continuous current, up to 10Amps pulse current

&Low saturation voltages

&High Gain

## **Package Dimensions**





REF.	Millimeter		REF.	Millimeter	
	Min.	Max.	nLI.	Min.	Max.
Α	6.70	7.30	В	13°ไ	ΓΥΡ.
С	2.90	3.10	J	2.30 REF.	
D	0.02	0.10	1	6.30	6.70
Е	0°	10°	2	6.30	6.70
1	0.60	0.80	3	3.30	3.70
Н	0.25	0.35	4	3.30	3.70
			5	1.40	1.80

## **Absolute Maximum Ratings at Ta = 25**

Parameter	Symbol	Ratings	Unit
Junction Temperature	Tj	+150	
Storage Temperature	Tstg	-55~+150	
Collector to Base Voltage	Vсво	-30	V
Collector to Emitter Voltage	VCEO	-25	V
Emitter to Base Voltage	VEBO	-5	V
Collector Current (DC)	lc	-4	A
Collector Current (Pulse)	Ісм	-10	A
Total Power Dissipation	Po	2.5	W
*The manuscription and he discingted as	and the state of t	1	

<sup>\*</sup>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:, unless otherwise stated)

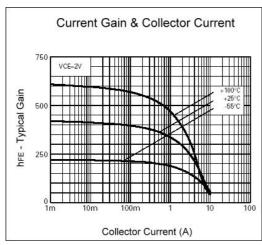
Symbol	Min.	Тур.	Max.	Unit	Test Conditions
ВУсво	-30	-	-	V	Ic=-100uA , IE=0
BVces	-25	-	-	V	Ic=-100uA
*BVceo	-25	-	-	V	IC=-10mA, IB=0
BVcev	-25	-	-	V	Ic=-100uA, VEB=1V
BVEBO	-5	-	-	V	IE=-100uA,IC=0
Ісво	-	-	-100	nA	Vcb=-24V, IE=0
ICES	-	-	-100	nA	VCES=-20V
<b>Г</b> ЕВО	-	-	-100	nA	VEB=-4V, IC=0
*VCE(sat)1	-	-	-80	mV	Ic=-100mA, IB=-1mA
*VCE(sat)2	-	-	-170	mV	Ic=-500mA, IB=-3mA
*VCE(sat)3	-	-	-240	mV	IC=-1A, IB=-7mA
*VCE(sat)4	-	-	-260	mV	Ic=-2A, IB=-30mA
*VCE(sat)5	-	-	-350	mV	Ic=-4A, IB=-140mA
*VBE(sat)	-	-	-1.05	V	Ic=-4A, IB=-140mA
*VBE(on)	-	-	1.0	V	VCE=-2V, IC=-4A
*hFE1	270	-	-		VCE=-2V, IC=-10mA
*hFE2	250	-	800		VCE=-2V, IC=-0.5A
*hFE3	195	-	-		VCE=-2V, IC=-2A
*hFE4	115	-	-		VCE=-2V, IC=-5A

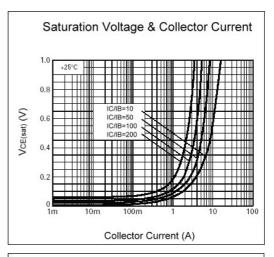
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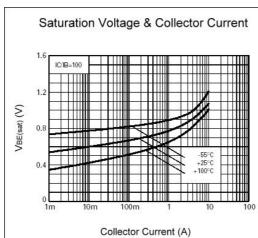
*hFE5	-	50	-		VCE=-2V, IC=-10A
fT	-	135	-	MHz	VCE=-10V, IC=-50mA, f=50MHz
Cob	-	50	-	pF	VCB=-10V, IE=0, f=1MHz
ton	-	150	-	ns	Vcc=-10V, Ic=-4A, IB1=-IB2=-40mA
toff	-	270	-	115	VCC=-10V, IC=-4A, IB1=-IB2=-40IIIA

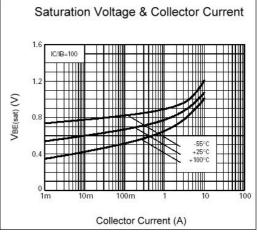
<sup>\*</sup>Measured under pulse condition. Pulse width=300µs, Duty Cycle≤2%

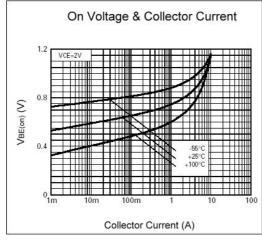
#### **Characteristics Curve**

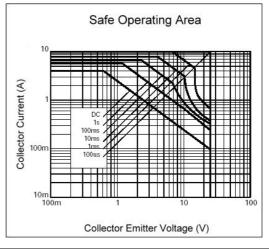












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