GL9411A

PNP SILICON PLANAR MEDIUM POWER HIGH GAIN TRANSISTOR

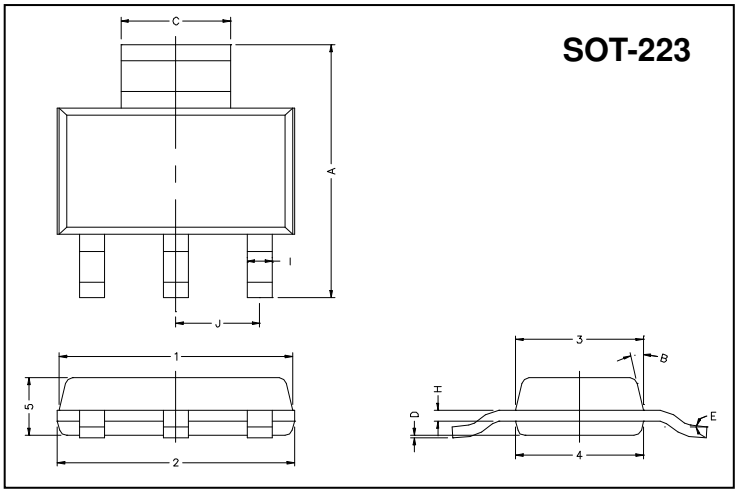
Description

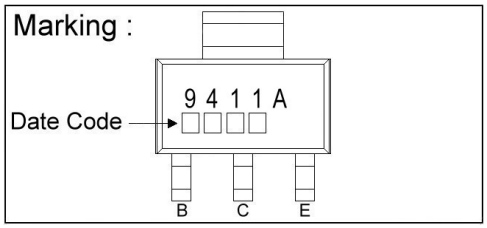
The GL9411A is designed for general purpose switching and amplifier applications.

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℃

Parameter	Symbol	Ratings	Unit
Junction Temperature	Tj	+150	℃
Storage Temperature	Tstg	-55~+150	℃
Collector to Base Voltage	V_{CBO}	-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.**

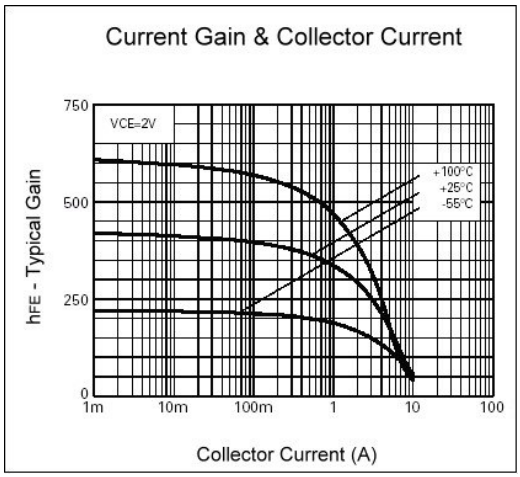
Electrical Characteristics (Ta = 25℃, unless otherwise stated)

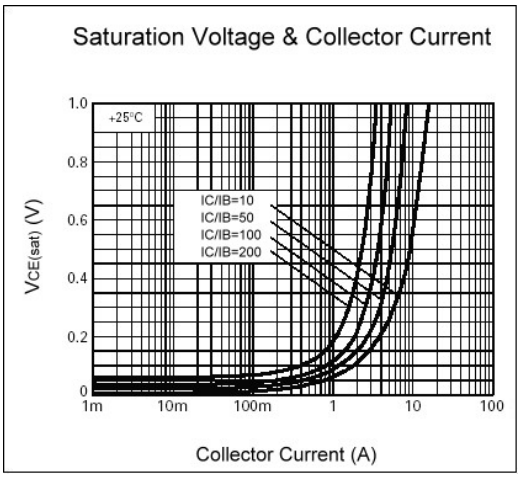
Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BV_{CBO}	-30	-	-	V	I_C=-100uA , I_E=0
BV_{CES}	-25	-	-	V	I_C=-100uA
*BV_{CEO}	-25	-	-	V	I_C=-10mA, I_B=0
BV_{CEV}	-25	-	-	V	I_C=-100uA, V_{EB}=1V
BV_{EBO}	-5	-	-	V	I_E=-100uA ,I_C=0
I_{CBO}	-	-	-100	nA	V_{CB}=-24V, I_E=0
I_{CES}	-	-	-100	nA	V_{CES}=-20V
I_{EBO}	-	-	-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_{FE}1	270	-	-		V_{CE}=-2V, I_C=-10mA
*h_{FE}2	250	-	800		V_{CE}=-2V, I_C=-0.5A
*h_{FE}3	195	-	-		V_{CE}=-2V, I_C=-2A
*h_{FE}4	115	-	-		V_{CE}=-2V, I_C=-5A

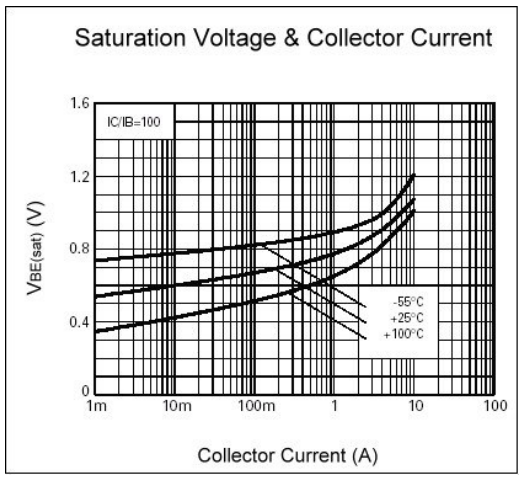
*$h_{FE}5$	-	50	-		V_{CE}=-2V, I_C=-10A
fT	-	135	-	MHz	V_{CE}=-10V, I_C=-50mA, f=50MHz
Cob	-	50	-	pF	V_{CB}=-10V, I_E=0, f=1MHz
t_{on}	-	150	-	ns	V_{CC}=-10V, I_C=-4A, I_{B1}=-I_{B2}=-40mA
t_{off}	-	270	-		

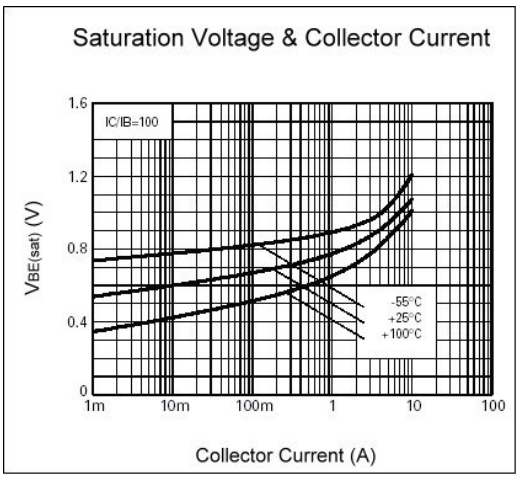
***Measured under pulse condition. Pulse width=300μs, Duty Cycle≤2%**

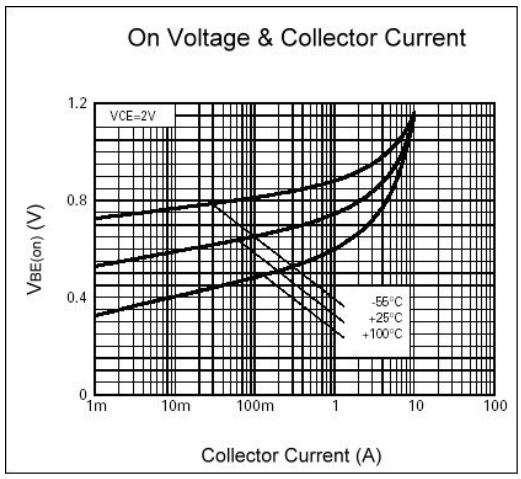
Characteristics Curve

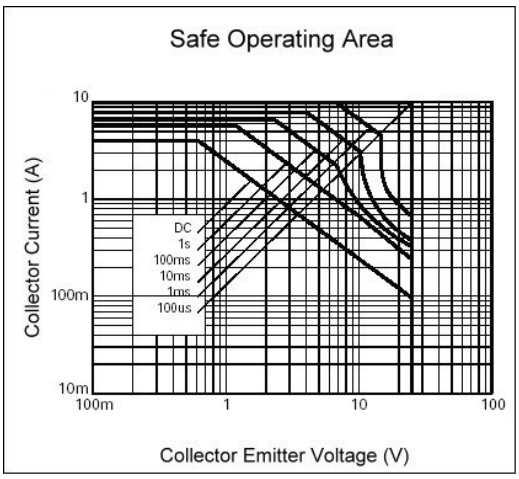












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