

GL949

PNP SILICON PLANAR HIGH CURRENT TRANSISTOR

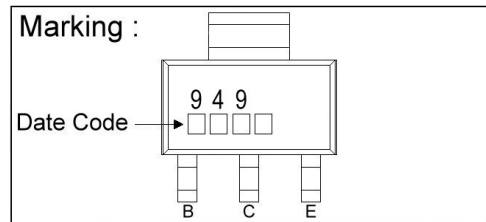
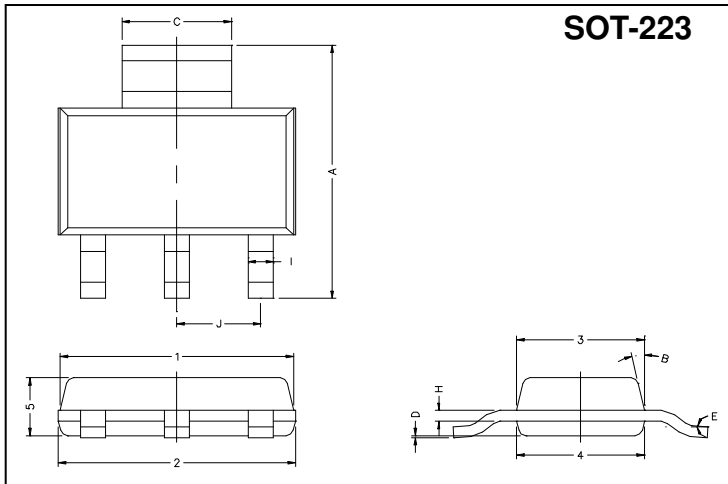
Description

The GL949 is designed for general purpose switching and amplifier applications.

Features

- 6Amps continuous current, up to 20Amps pulse current
- Very low saturation voltages

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}	-50	V
Collector to Emitter Voltage	V _{CEO}	-30	V
Emitter to Base Voltage	V _{EBO}	-6	V
Collector Current (DC)	I _c	-5.5	A
Collector Current (Pulse)	I _{CM}	-20	A
Total Power Dissipation	P _D	3	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.

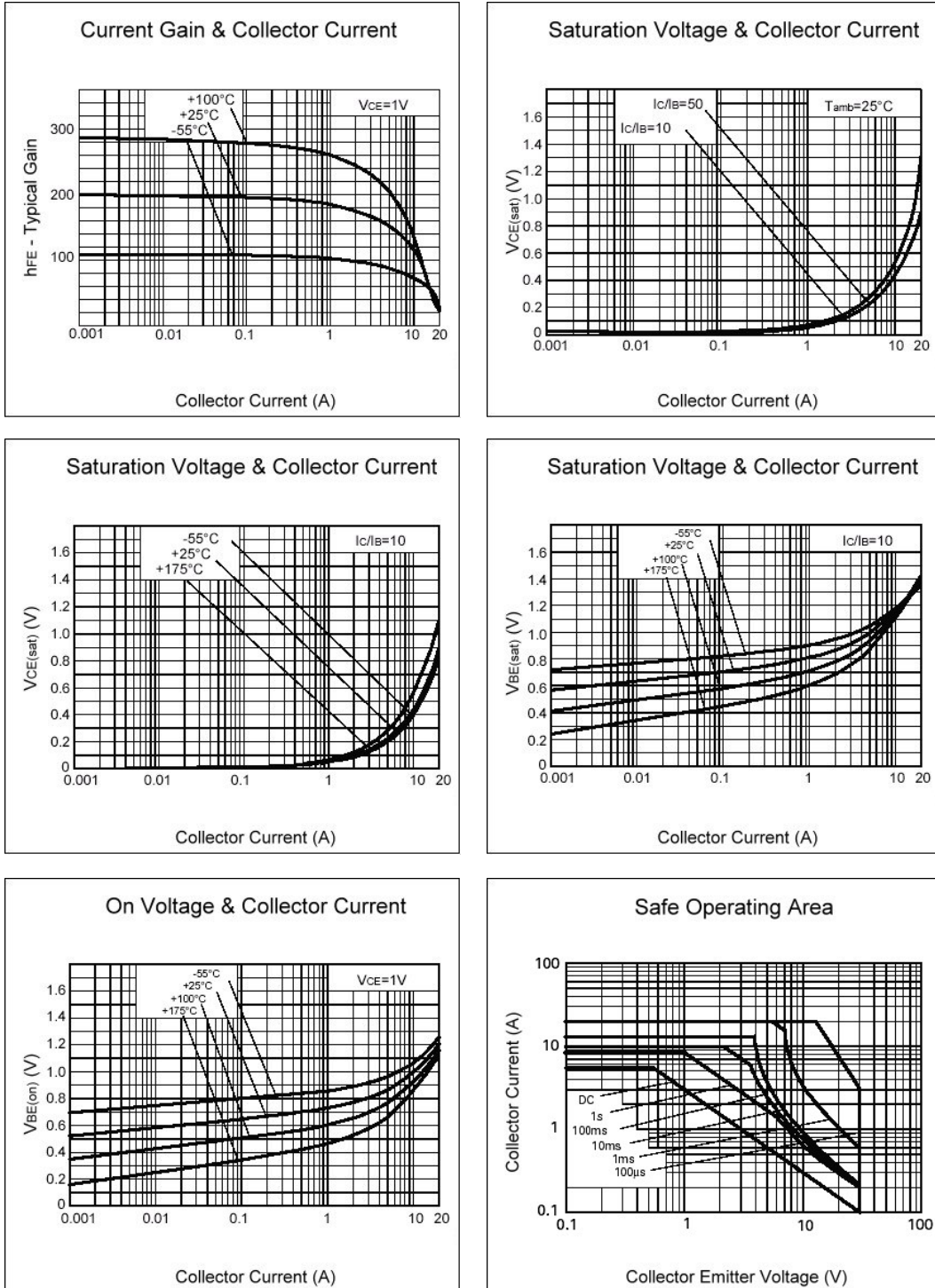
Electrical Characteristics (Ta = 25°C, unless otherwise stated)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
V _{CB0}	-50	-	-	V	I _c =-100uA, I _E =0
V _{CB0}	-50	-	-	V	I _c =-1uA, R _B ≤1kΩ
V _{CEO}	-30	-	-	V	I _c =-10mA, I _B =0
V _{EBO}	-6	-	-	V	I _E =-100uA, I _c =0
I _{CB0}	-	-	-50	nA	V _{CB} =-40V, I _E =0
I _{CB0}	-	-	-50	nA	V _{CB} =-40V, R _B ≤1kΩ
I _{EBO}	-	-	-10	nA	V _{EB} =-6V, I _c =0
*V _{CE(sat)1}	-	-	-75	mV	I _c =-500mA, I _B =-20mA
*V _{CE(sat)2}	-	-	-140	mV	I _c =-1A, I _B =-20mA
*V _{CE(sat)3}	-	-	-270	mV	I _c =-2A, I _B =-200mA
*V _{CE(sat)4}	-	-	-440	mV	I _c =-5.5A, I _B =-500mA
*V _{BE(sat)}	-	-	-1.25	V	I _c =-5.5A, I _B =-500mA
*V _{BE(on)}	-	-	-1.06	V	V _{CE} =-1V, I _c =-5.5A
*h _{FE1}	100	-	-		V _{CE} =-1V, I _c =-10mA
*h _{FE2}	100	-	300		V _{CE} =-1V, I _c =-1A
*h _{FE3}	75	-	-		V _{CE} =-1V, I _c =-5A
*h _{FE4}	-	35	-		V _{CE} =-2V, I _c =-20A
f _T	-	100	-	MHz	V _{CE} =-10V, I _c =-100mA, f=50MHz
C _{ob}	-	122	-	pF	V _{CB} =-10V, I _E =0, f=1MHz

Ton	-	120	-	ns	V _{CC} =-10V, I _C =-4A, I _{B1} =-I _{B2} =-400mA
Toff	-	130	-		

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

Characteristics Curve



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