

GL949

PNP SILICON PLANAR HIGH CURRENT TRANSISTOR

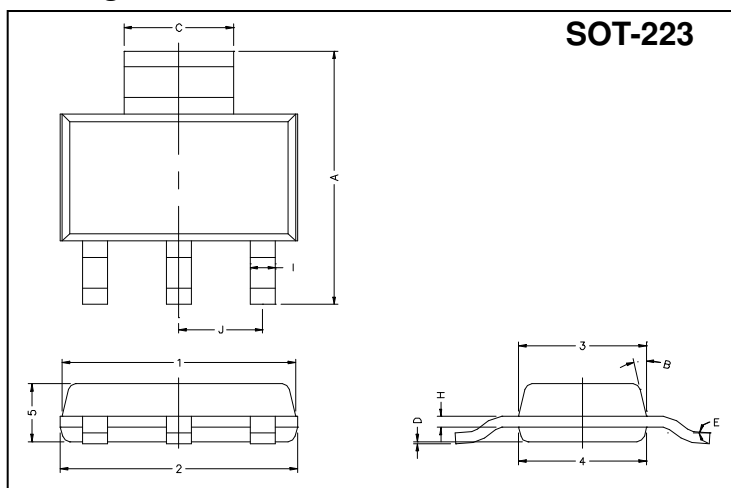
Description

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

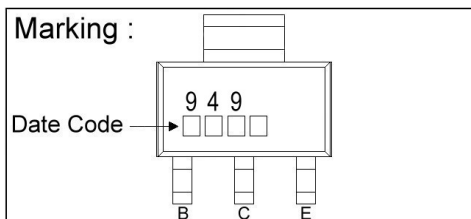
Features

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

Package Dimensions



Marking :



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	Tj	+150	°C
Storage Temperature	Tstg	-55~+150	°C
Collector to Base Voltage	VCBO	-50	V
Collector to Emitter Voltage	VCEO	-30	V
Emitter to Base Voltage	VEBO	-6	V
Collector Current (DC)	Ic	-5.5	A
Collector Current (Pulse)	ICM	-20	A
Total Power Dissipation	Pd	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.

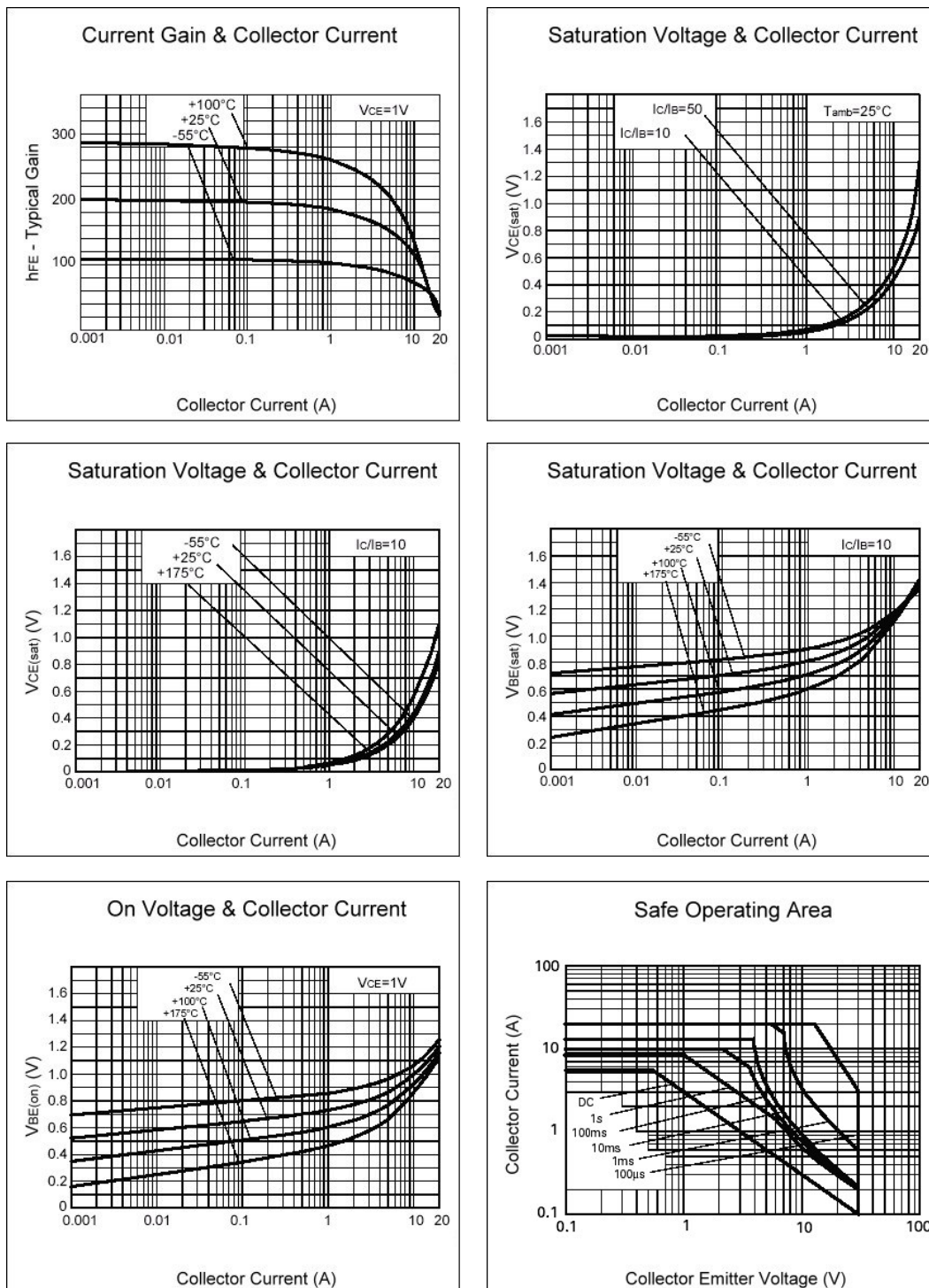
Electrical Characteristics (Ta = 25°C, unless otherwise stated)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	-50	-	-	V	Ic=-100uA, IE=0
BVCER	-50	-	-	V	Ic=-1uA, RB≤1kΩ
BVCEO	-30	-	-	V	Ic=-10mA, IB=0
BVEBO	-6	-	-	V	IE=-100uA, Ic=0
ICBO	-	-	-50	nA	VCB=-40V, IE=0
ICER	-	-	-50	nA	VCB=-40V, R≤1kΩ
IEBO	-	-	-10	nA	VEB=-6V, Ic=0
*VCE(sat)1	-	-	-75	mV	Ic=-500mA, IB=-20mA
*VCE(sat)2	-	-	-140	mV	Ic=-1A, IB=-20mA
*VCE(sat)3	-	-	-270	mV	Ic=-2A, IB=-200mA
*VCE(sat)4	-	-	-440	mV	Ic=-5.5A, IB=-500mA
*VBE(sat)	-	-	-1.25	V	Ic=-5.5A, IB=-500mA
*VBE(on)	-	-	-1.06	V	VCE=-1V, Ic=-5.5A
*hFE1	100	-	-		VCE=-1V, Ic=-10mA
*hFE2	100	-	300		VCE=-1V, Ic=-1A
*hFE3	75	-	-		VCE=-1V, Ic=-5A
*hFE4	-	35	-		VCE=-2V, Ic=-20A
fT	-	100	-	MHz	VCE=-10V, Ic=-100mA, f=50MHz
Cob	-	122	-	pF	VCB=-10V, IE=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



Important Notice:

- All rights are reserved. Reproduction in whole or in part is prohibited without the prior written approval of GTM.
- GTM reserves the right to make changes to its products without notice.
- GTM semiconductor products are not warranted to be suitable for use in life-support Applications, or systems.
- GTM assumes no liability for any consequence of customer product design, infringement of patents, or application assistance.

Head Office And Factory:

- **Taiwan:** No. 17-1 Tatung Rd. Fu Kou Hsin-Chu Industrial Park, Hsin-Chu, Taiwan, R. O. C.
TEL : 886-3-597-7061 FAX : 886-3-597-9220, 597-0785
- **China:** (201203) No.255, Jang-Jiang Tsai-Lueng RD. , Pu-Dung-Hsin District, Shang-Hai City, China
TEL : 86-21-5895-7671 ~ 4 FAX : 86-21-38950165