

## GL359

### PNP SILICON PLANAR HIGH CURRENT TRANSISTOR

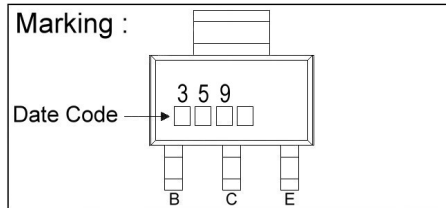
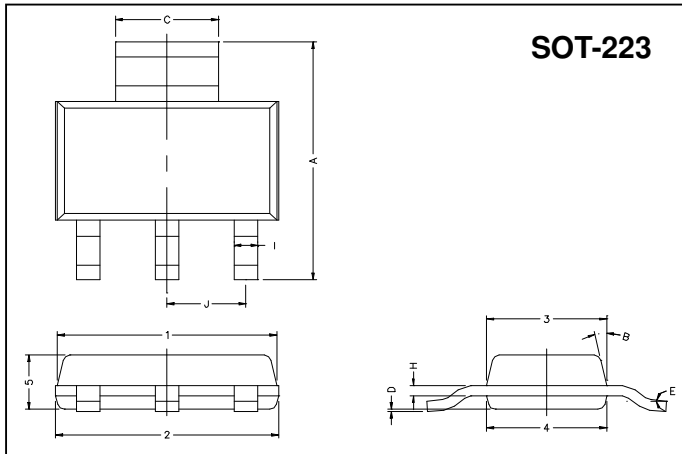
#### Description

The GL359 is designed for general purpose switching and amplifier applications.

#### Features

- 5 Amps continuous current, up to 10Amps peak current
- Excellent gain characteristic specified up to 10Amps
- 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 <sub>J</sub>	+150	°C
Storage Temperature	T <sub>stg</sub>	-55~+150	°C
Collector to Base Voltage	V <sub>CB0</sub>	-140	V
Collector to Emitter Voltage	V <sub>CE0</sub>	-100	V
Emitter to Base Voltage	V <sub>EBO</sub>	-6	V
Collector Current (DC)	I <sub>C</sub>	-5	A
Collector Current (Pulse)	I <sub>C</sub>	-10	A
Total Power Dissipation	P <sub>D</sub>	3	W

\*The power which can be dissipated assuming the device is mounted in a typical manner on a P.C.B. with copper equal to 4 square inch minimum.

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

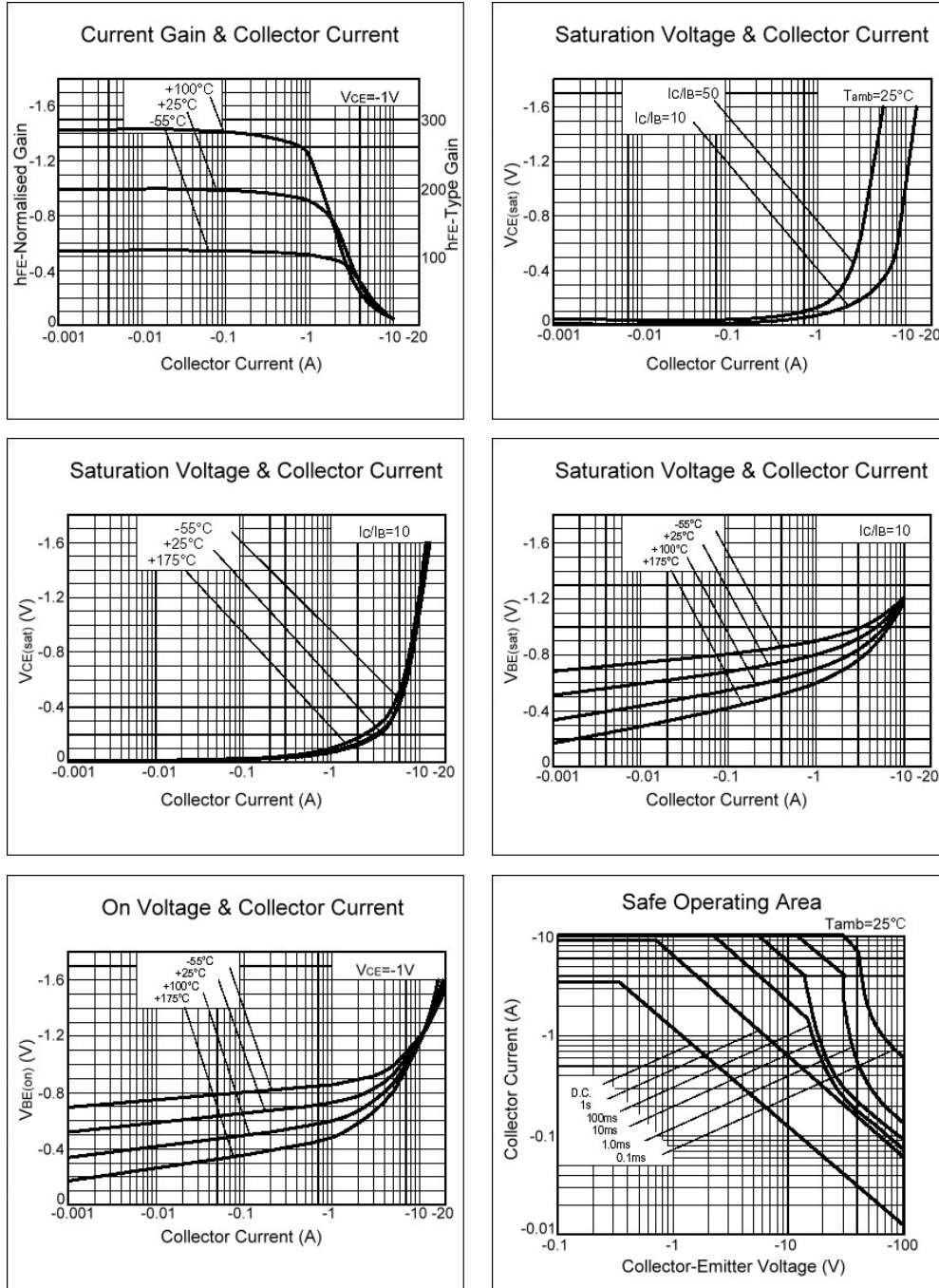
Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BV <sub>CB0</sub>	-140	-	-	V	I <sub>C</sub> =-100uA, I <sub>E</sub> =0
*BV <sub>CE0</sub>	-100	-	-	V	I <sub>C</sub> =-10mA, I <sub>B</sub> =0
BV <sub>EBO</sub>	-6	-	-	V	I <sub>E</sub> =-100uA, I <sub>C</sub> =0
I <sub>CB0</sub>	-	-	-50	nA	V <sub>CB</sub> =-100V, I <sub>E</sub> =0
I <sub>CE0</sub>	-	-	-50	nA	V <sub>CE</sub> =-100V
I <sub>EBO</sub>	-	-	-10	nA	V <sub>EB</sub> =-6V, I <sub>C</sub> =0
*V <sub>CE(sat)1</sub>	-	-20	-50	mV	I <sub>C</sub> =-100mA, I <sub>B</sub> =-10mA
*V <sub>CE(sat)2</sub>	-	-90	-115	mV	I <sub>C</sub> =-1A, I <sub>B</sub> =-100mA
*V <sub>CE(sat)3</sub>	-	-160	-220	mV	I <sub>C</sub> =-2A, I <sub>B</sub> =-200mA
*V <sub>CE(sat)4</sub>	-	-300	-420	mV	I <sub>C</sub> =-4A, I <sub>B</sub> =-400mA
*V <sub>BE(sat)</sub>	-	-1.01	-1.17	V	I <sub>C</sub> =-4A, I <sub>B</sub> =-400mA
*V <sub>BE(on)</sub>	-	-0.925	-1.16	V	V <sub>CE</sub> =-1V, I <sub>C</sub> =-4A
*h <sub>FE1</sub>	100	200			V <sub>CE</sub> =-1V, I <sub>C</sub> =-10mA
*h <sub>FE2</sub>	100	200	300		V <sub>CE</sub> =-1V, I <sub>C</sub> =-1A
*h <sub>FE3</sub>	50	90			V <sub>CE</sub> =-1V, I <sub>C</sub> =-3A
*h <sub>FE4</sub>	30	50			V <sub>CE</sub> =-1V, I <sub>C</sub> =-4A
*h <sub>FE5</sub>	-	15			V <sub>CE</sub> =-1V, I <sub>C</sub> =-10A
f <sub>T</sub>	-	125	-	MHz	V <sub>CE</sub> =-10V, I <sub>C</sub> =-100mA, f=50MHz

Cob	-	65	-	pF	V <sub>CB</sub> =-10V, I <sub>E</sub> =0, f=1MHz
ton	-	110	-	ns	V <sub>CC</sub> =-10V, I <sub>C</sub> =-2A, I <sub>B1</sub> =-200mA, I <sub>B2</sub> =200mA
toff	-	460	-		

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

Spice parameter data is available upon request for this device.

## Characteristics Curve



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