

## GL159

### PNP SILICON PLANAR HIGH CURRENT TRANSISTOR

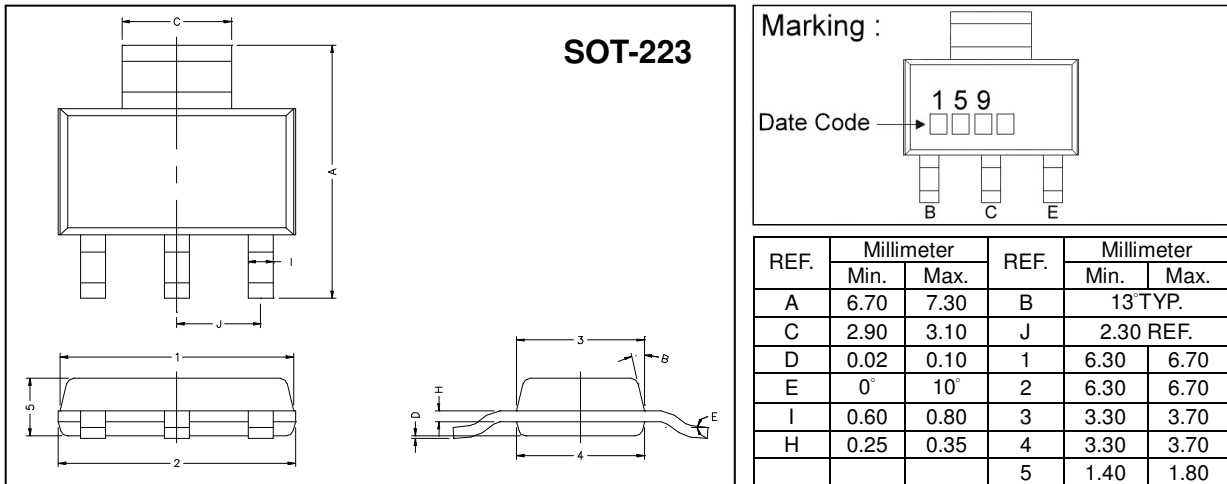
#### Description

The GL159 is designed for general purpose switching and amplifier applications.

#### Features

- 5 Amps continuous current, up to 15Amps peak current
- Excellent gain characteristic specified up to 10Amps
- Very low saturation voltages

#### Package Dimensions



#### 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	-100	V
Collector to Emitter Voltage	VCEO	-60	V
Emitter to Base Voltage	VEBO	-6	V
Collector Current (DC)	Ic	-5	A
Collector Current (Pulse)	Ic	-15	A
Total Power Dissipation	PD	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)

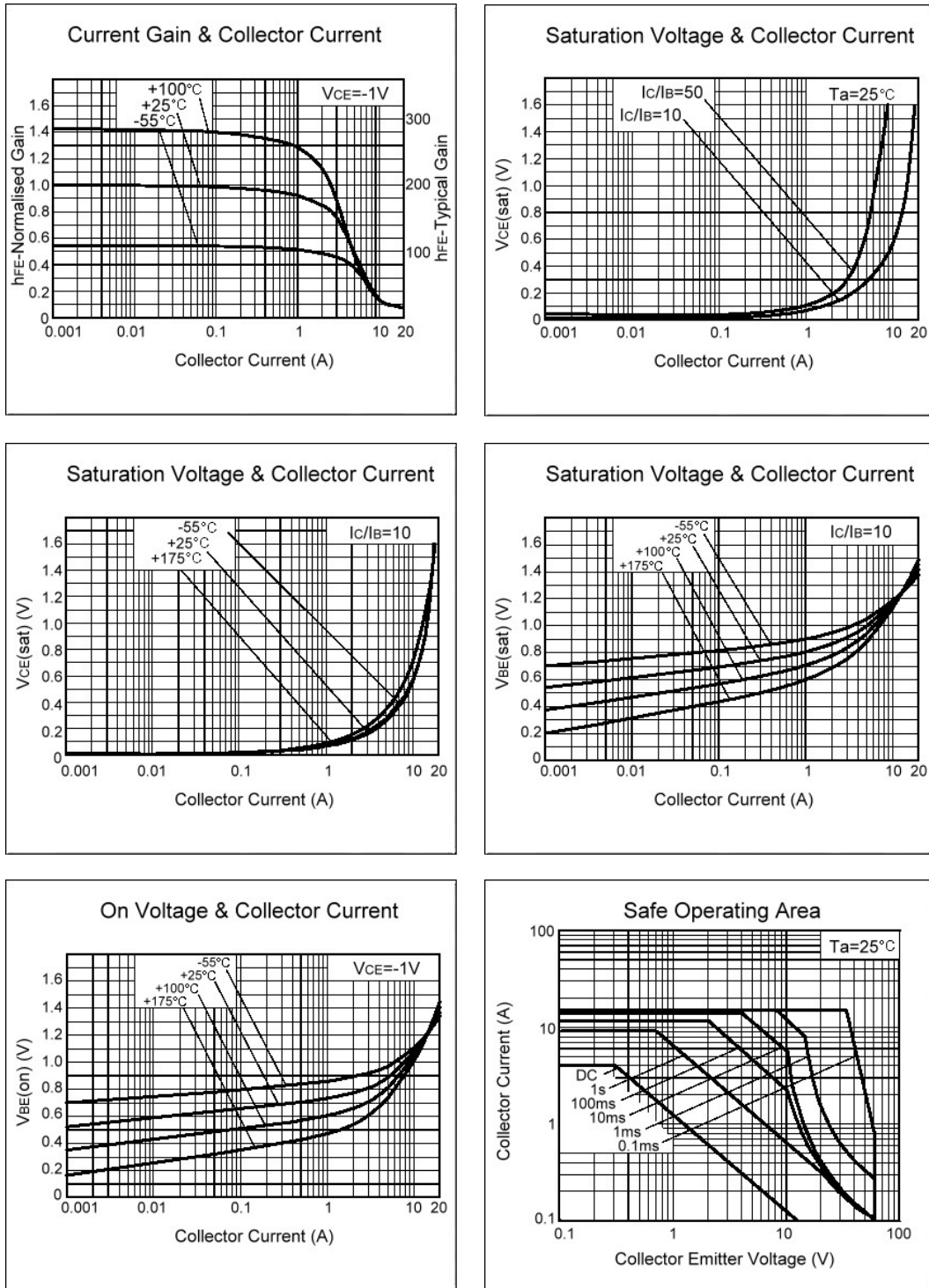
Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	-100	-	-	V	Ic=-100uA, IE=0
*BVCEO	-60	-	-	V	Ic=-10mA, IB=0
BVEBO	-6	-	-	V	IE=-100uA, Ic=0
ICBO	-	-	-50	nA	VCB=-80V, IE=0
ICES	-	-	-50	nA	VCE=-60V
IEBO	-	-	-10	nA	VEB=-6V, Ic=0
*VCE(sat)1	-	-20	-50	mV	Ic=-100mA, IB=-10mA
*VCE(sat)2	-	-85	-140	mV	Ic=-1A, IB=-100mA
*VCE(sat)3	-	-155	-210	mV	Ic=-2A, IB=-200mA
*VCE(sat)4	-	-370	-460	mV	Ic=-5A, IB=-500mA
*VBE(sat)	-	-1.08	-1.24	V	Ic=-5A, IB=-500mA
*VBE(on)	-	-0.935	-1.07	V	VCE=-1V, Ic=-5A
*hFE1	100	200			VCE=-1V, Ic=-10mA
*hFE2	100	200	300		VCE=-1V, Ic=-2A
*hFE3	75	90			VCE=-1V, Ic=-5A
*hFE4	10	25			VCE=-1V, Ic=-10A
fT	-	120	-	MHz	VCE=-10V, Ic=-100mA, f=50MHz

Cob	-	74	-	pF	$V_{CB}=-10V, I_E=0, f=1MHz$
ton	-	82	-	ns	$V_{CC}=-10V, I_C=-2A, I_{B1}=I_{B2}=-200mA$
toff	-	350	-		

\*Measured under pulse condition. Pulse width  $\leq 300\mu s$ , Duty Cycle  $\leq 2\%$

Spice parameter data is available upon request for this device.

## Characteristics Curve



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