GL159

PNP SILICON PLANAR HIGH CURRENT TRANSISTOR

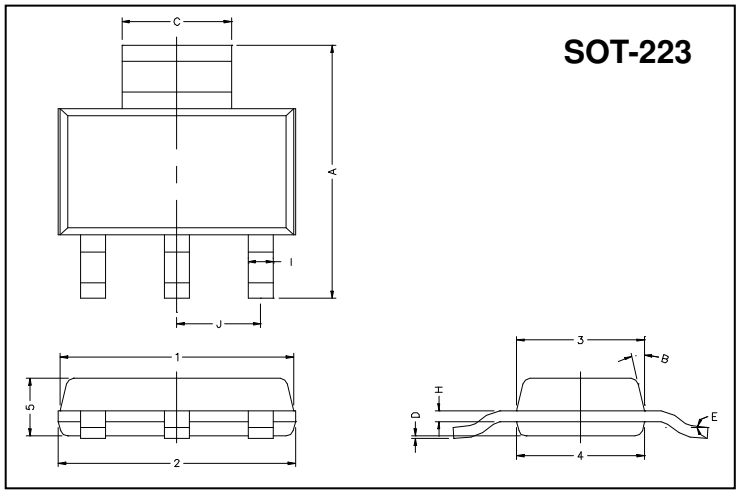
Description

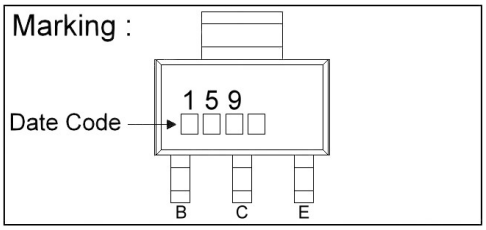
The GL159 is designed for general purpose switching and amplifier applications.

Features

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

Package Dimensions





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}	-100	V
Collector to Emitter Voltage	V_{CEO}	-60	V
Emitter to Base Voltage	V_{EBO}	-6	V
Collector Current (DC)	I_C	-5	A
Collector Current (Pulse)	I_C	-15	A
Total Power Dissipation	P_D	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℃,unless otherwise stated)

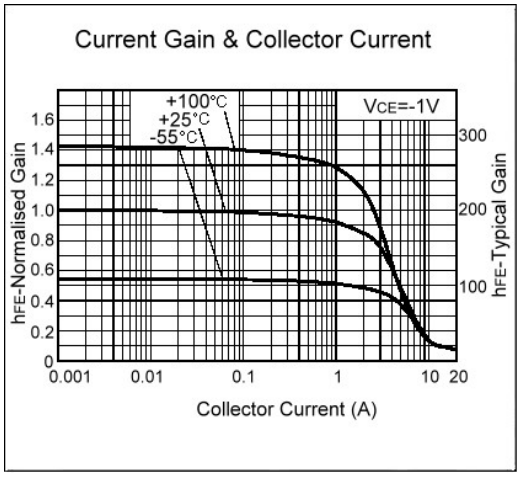
Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BV_{CBO}	-100	-	-	V	I_C=-100uA , I_E=0
*BV_{CEO}	-60	-	-	V	I_C=-10mA, I_B=0
BV_{EBO}	-6	-	-	V	I_E=-100uA ,I_C=0
I_{CBO}	-	-	-50	nA	V_{CB}=-80V, I_E=0
I_{CES}	-	-	-50	nA	V_{CES}=-60V
I_{EBO}	-	-	-10	nA	V_{EB}=-6V, I_C=0
*$V_{CE(sat)}$1	-	-20	-50	mV	I_C=-100mA, I_B=-10mA
*$V_{CE(sat)}$2	-	-85	-140	mV	I_C=-1A, I_B=-100mA
*$V_{CE(sat)}$3	-	-155	-210	mV	I_C=-2A, I_B=-200mA
*$V_{CE(sat)}$4	-	-370	-460	mV	I_C=-5A, I_B=-500mA
*$V_{BE(sat)}$	-	-1.08	-1.24	V	I_C=-5A, I_B=-500mA
*$V_{BE(on)}$	-	-0.935	-1.07	V	V_{CE}=-1V, I_C=-5A
*h_{FE}1	100	200			V_{CE}=-1V, I_C=-10mA
*h_{FE}2	100	200	300		V_{CE}=-1V, I_C=-2A
*h_{FE}3	75	90			V_{CE}=-1V, I_C=-5A
*h_{FE}4	10	25			V_{CE}=-1V, I_C=-10A
fT	-	120	-	MHz	V_{CE}=-10V, I_C=-100mA, f=50MHz

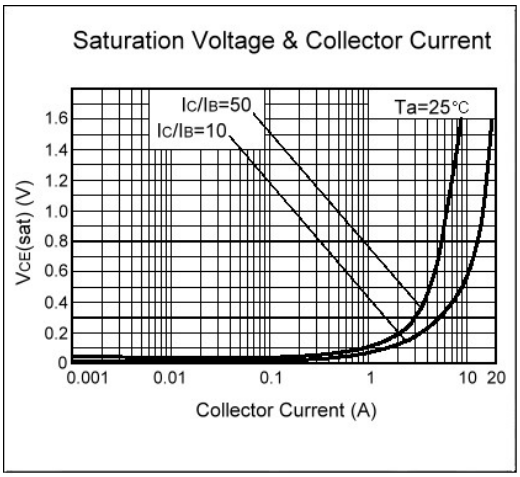
Cob	-	74	-	pF	V_{CB}=-10V, I_E=0, f=1MHz
t_{on}	-	82	-	ns	V_{CC}=-10V, I_C=-2A, I_{B1}=I_{B2}=-200mA
t_{off}	-	350	-		

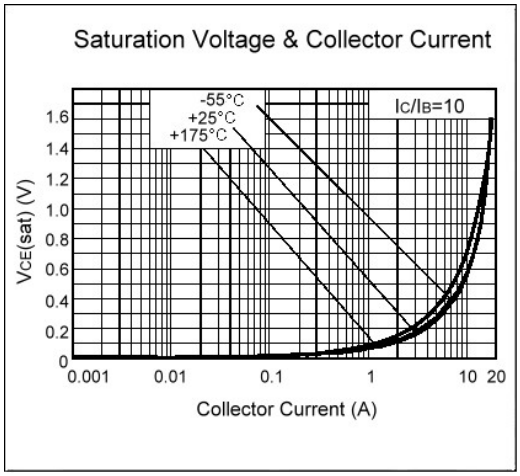
***Measured under pulse condition. Pulse width≦300μs, Duty Cycle≦2%**

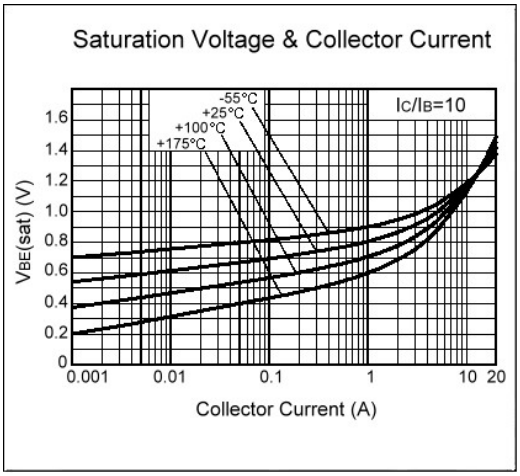
Spice parameter data is available upon request for this device.

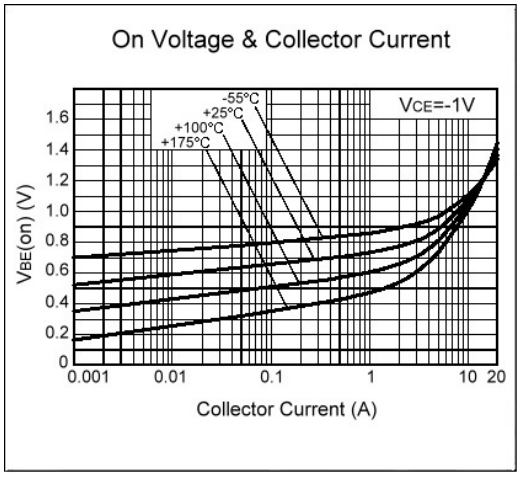
Characteristics Curve

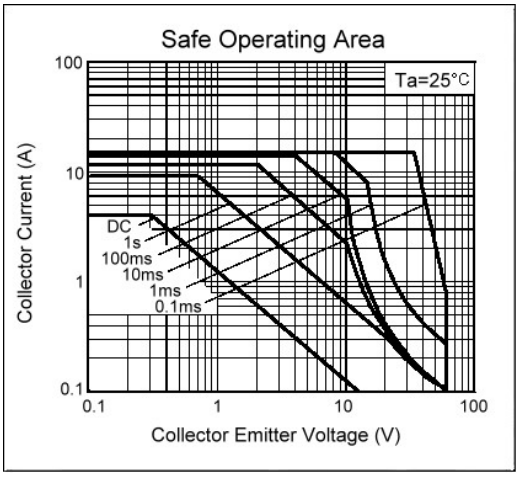












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