GL156

NPN SILICON PLANAR HIGH PERFORMANCE TRANSISTOR

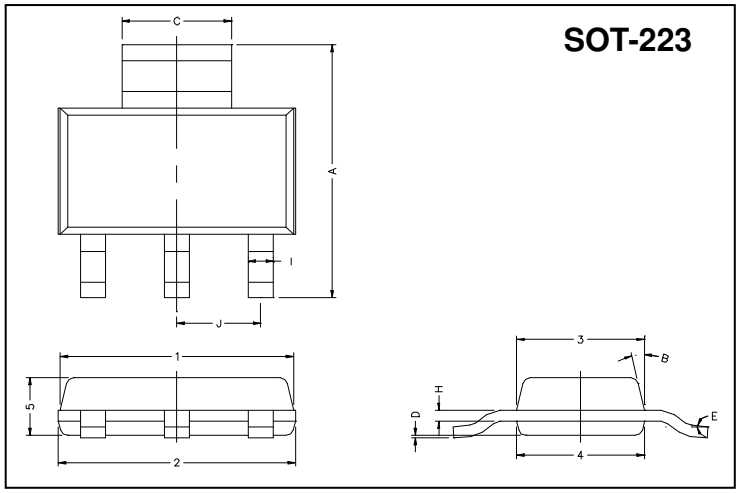
Description

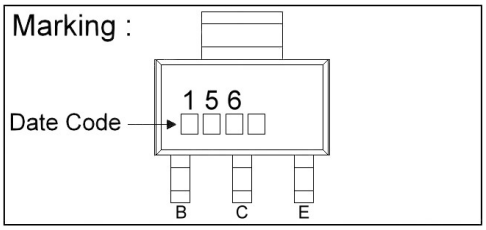
The GL156 is designed for general purpose switching and amplifier applications.

Features

- 60 Volt V_{CEO}
- 3 Amp continuous current
- Low saturation voltage

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℃

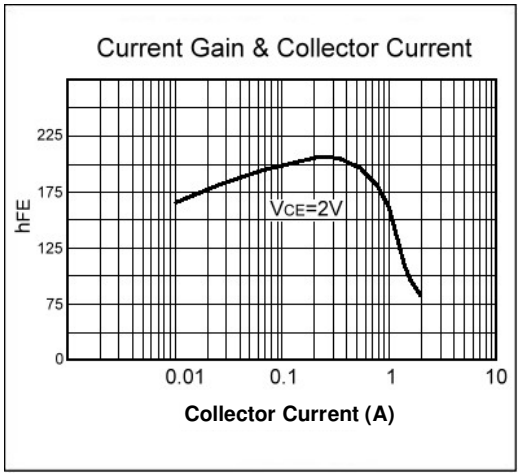
Parameter	Symbol	Ratings	Unit
Junction Temperature	Tj	+150	℃
Storage Temperature	Tstg	-55~+150	℃
Collector to Base Voltage	V_{CBO}	80	V
Collector to Emitter Voltage	V_{CEO}	60	V
Emitter to Base Voltage	V_{EBO}	5	V
Collector Current (DC)	I_C	3	A
Collector Current (Pulse)	I_C	6	A
Total Power Dissipation	P_D	2	W

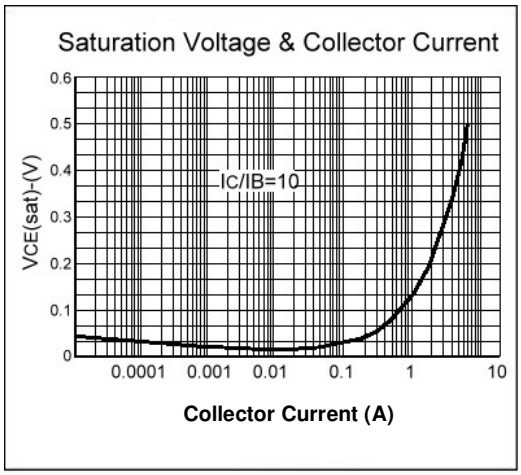
Electrical Characteristics (Ta = 25℃, unless otherwise noted)

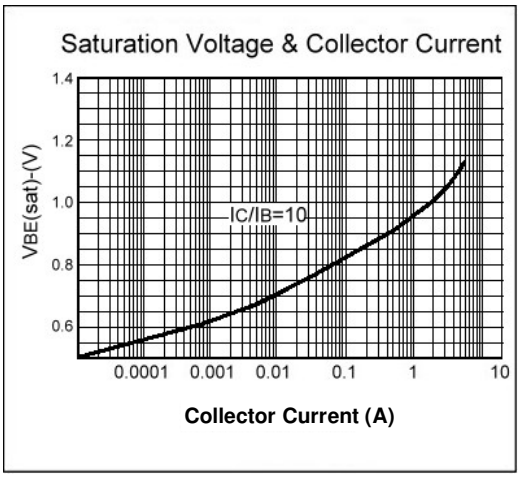
Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BV_{CBO}	80	-	-	V	I_C=100uA, I_E=0
*BV_{CEO}	60	-	-	V	I_C=10mA, I_B=0
BV_{EBO}	5	-	-	V	I_E=100uA, I_C=0
I_{CBO}	-	-	100	nA	V_{CB}=60V, I_E=0
I_{EBO}	-	-	100	nA	V_{EB}=4V, I_C=0
*V_{CE}(sat)1	-	0.12	0.3	V	I_C=1A, I_B=0.1A
*V_{CE}(sat)2	-	0.43	0.6	V	I_C=3A, I_B=0.3A
*V_{BE}(sat)	-	0.9	1.25	V	I_C=1A, I_B=0.1A
*V_{BE}(on)	-	0.8	1.0	V	I_C=1A, V_{CE}=2V
*h_{FE}1	70	200	-		V_{CE}=2V, I_C=50mA
*h_{FE}2	100	200	300		V_{CE}=2V, I_C=500mA
*h_{FE}3	80	170	-		V_{CE}=2V, I_C=1A
*h_{FE}4	40	80	-		V_{CE}=2V, I_C=2A
fT	140	175	-	MHz	V_{CE}=5V, I_C=100mA, f=100MHz
ton	-	45	-	ns	V_{CC}=10V, I_C=500mA, I_{B1}=I_{B2}=50mA
toff	-	800	-		
Cob	-	-	30	pF	V_{CB}=10V, f=1MHz

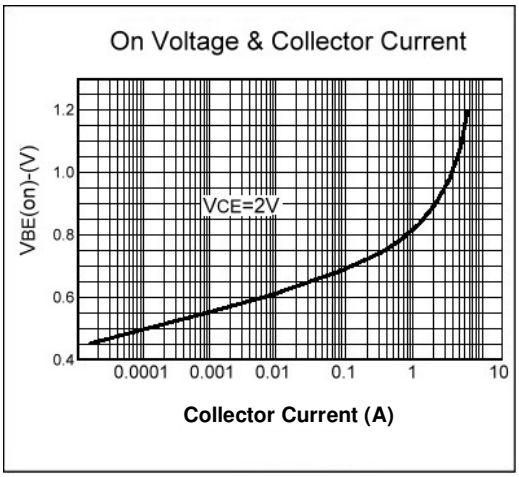
***Measured under pulse condition. Pulse width≦300μs, Duty Cycle≦2%**
Spice parameter data is available upon request for this device.

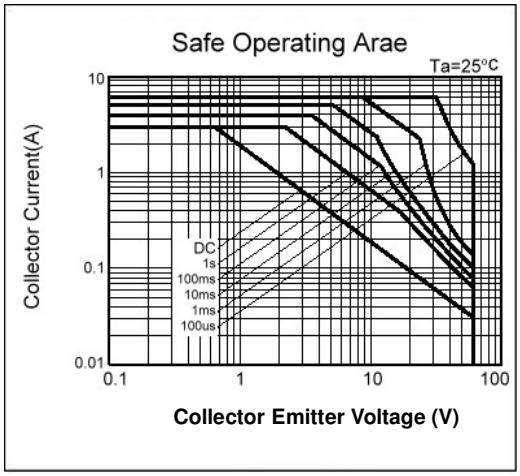
Characteristics Curve

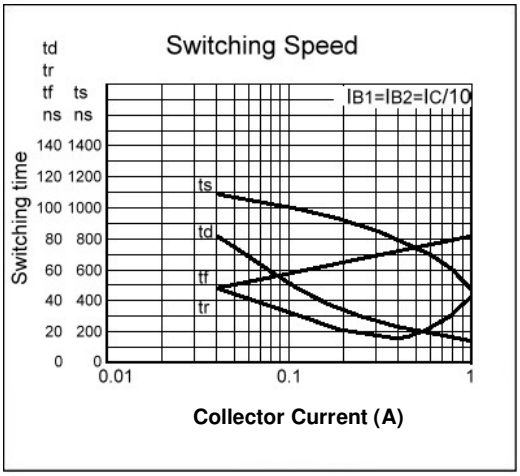












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