

GL157

PNP SILICON PLANAR HIGH PERFORMANCE TRANSISTOR

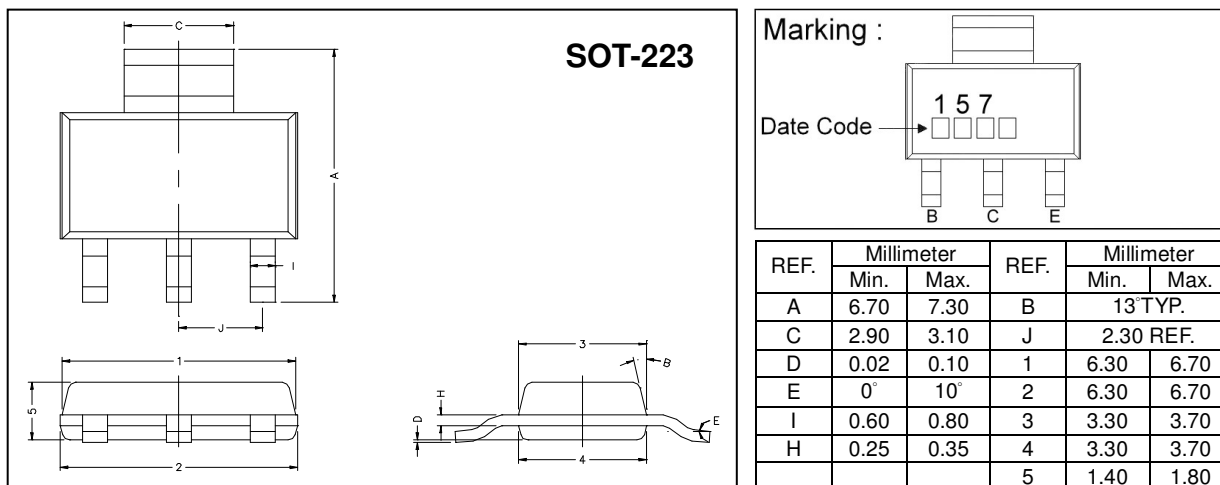
Description

The GL157 is designed for general purpose switching and amplifier applications.

Features

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

Package Dimensions



Absolute Maximum Ratings at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Ratings	Unit
Junction Temperature	T_j	+150	$^\circ\text{C}$
Storage Temperature	T_{stg}	-55~+150	$^\circ\text{C}$
Collector to Base Voltage	V_{CB0}	-80	V
Collector to Emitter Voltage	V_{CE0}	-60	V
Emitter to Base Voltage	V_{EB0}	-5	V
Collector Current (DC)	I_C	-3	A
Collector Current (Pulse)	I_C	-6	A
Total Power Dissipation	P_D	2	W

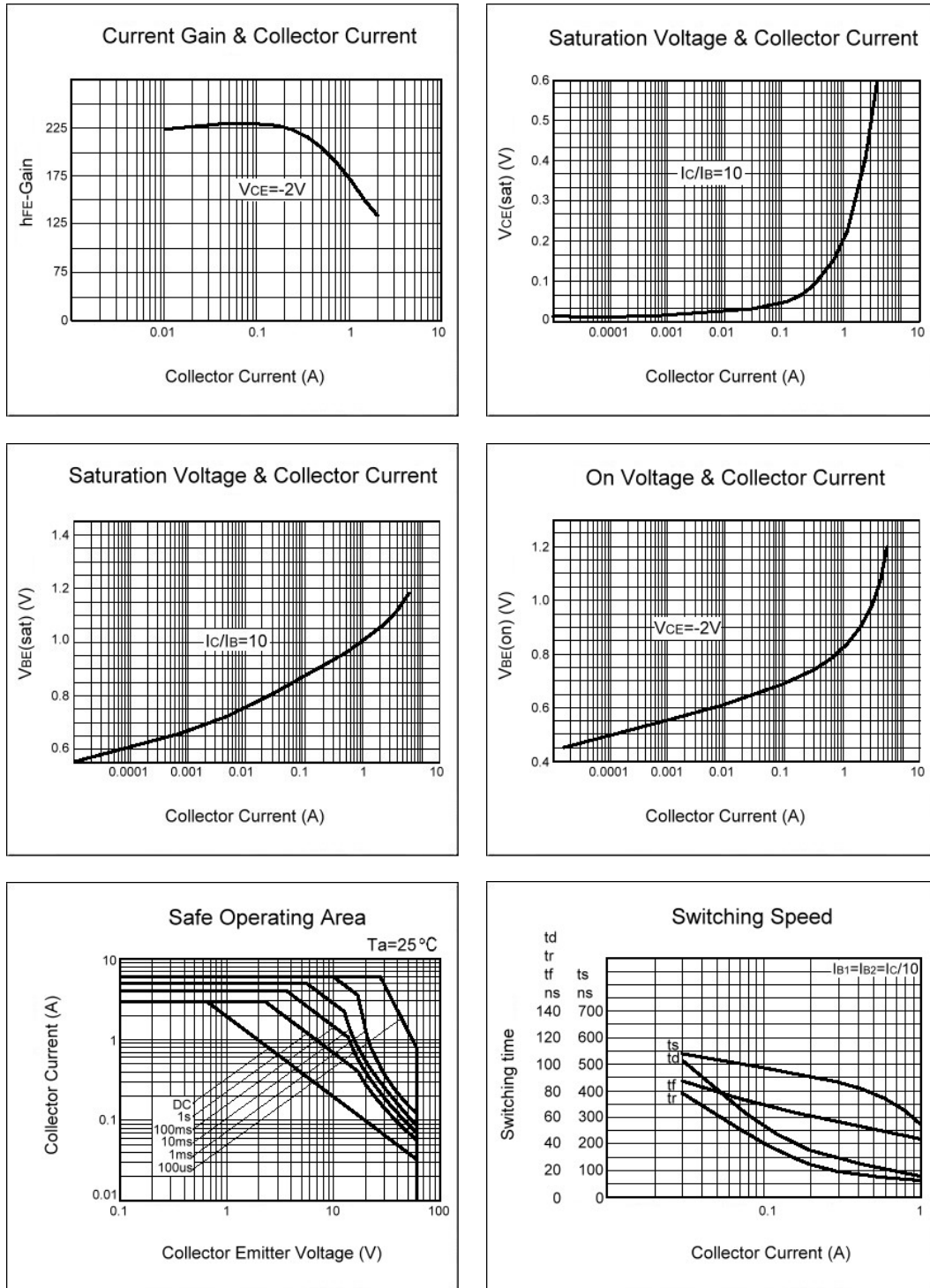
Electrical Characteristics ($T_a = 25^\circ\text{C}$, unless otherwise noted)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BV_{CB0}	-80	-	-	V	$I_C = -100\mu\text{A}$, $I_E = 0$
$*BV_{CE0}$	-60	-	-	V	$I_C = -10\text{mA}$, $I_B = 0$
BV_{EB0}	-5	-	-	V	$I_E = -100\mu\text{A}$, $I_C = 0$
I_{CBO}	-	-	-100	nA	$V_{CB} = -60\text{V}$, $I_E = 0$
I_{EBO}	-	-	-100	nA	$V_{EB} = -4\text{V}$, $I_C = 0$
$*V_{CE(sat)1}$	-	-150	-300	mV	$I_C = -1\text{A}$, $I_B = -100\text{mA}$
$*V_{CE(sat)2}$	-	-450	-600	mV	$I_C = -3\text{A}$, $I_B = -300\text{mA}$
$*V_{BE(sat)}$	-	-0.9	-1.25	V	$I_C = -1\text{A}$, $I_B = -100\text{mA}$
$*V_{BE(on)}$	-	-0.8	-1.0	V	$V_{CE} = -2\text{V}$, $I_C = -1\text{A}$
$*h_{FE1}$	70	200			$V_{CE} = -2\text{V}$, $I_C = -50\text{mA}$
$*h_{FE2}$	100	200	300		$V_{CE} = -2\text{V}$, $I_C = -500\text{mA}$
$*h_{FE3}$	80	170			$V_{CE} = -2\text{V}$, $I_C = -1\text{A}$
$*h_{FE4}$	40	150			$V_{CE} = -2\text{V}$, $I_C = -2\text{A}$
f_T	100	140	-	MHz	$V_{CE} = -5\text{V}$, $I_C = -100\text{mA}$, $f = 100\text{MHz}$
C_{ob}	-	-	30	pF	$V_{CB} = -10\text{V}$, $I_E = 0$, $f = 1\text{MHz}$
t_{on}	-	40	-	ns	$V_{CC} = -10\text{V}$, $I_C = -500\text{mA}$, $I_{B1} = I_{B2} = -50\text{mA}$
t_{off}	-	450	-		

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

Spice parameter data is available upon request for this device.

Characteristics Curve



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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