

GM157

PNP SILICON PLANAR HIGH PERFORMANCE TRANSISTOR

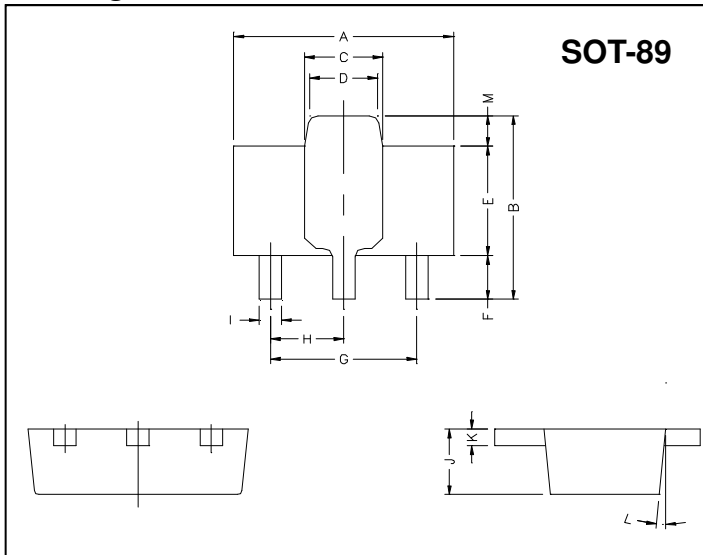
Description

The GM157 is designed for general purpose switching and amplifier applications.

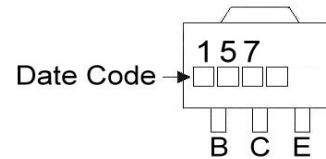
Features

- -60 Volt V_{CE0}
- 3 Amp continuous current
- Low saturation voltage

Package Dimensions



Marking :



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	4.4	4.6	G	3.00	REF.
B	4.05	4.25	H	1.50	REF.
C	1.50	1.70	I	0.40	0.52
D	1.30	1.50	J	1.40	1.60
E	2.40	2.60	K	0.35	0.41
F	0.89	1.20	L	5°	TYP.
			M	0.70	REF.

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_{EBO}	-5	V
Collector Current (DC)	I_c	-3	A
Collector Current (Pulse)	I_c	-6	A
Total Power Dissipation	P_D	1.2	W

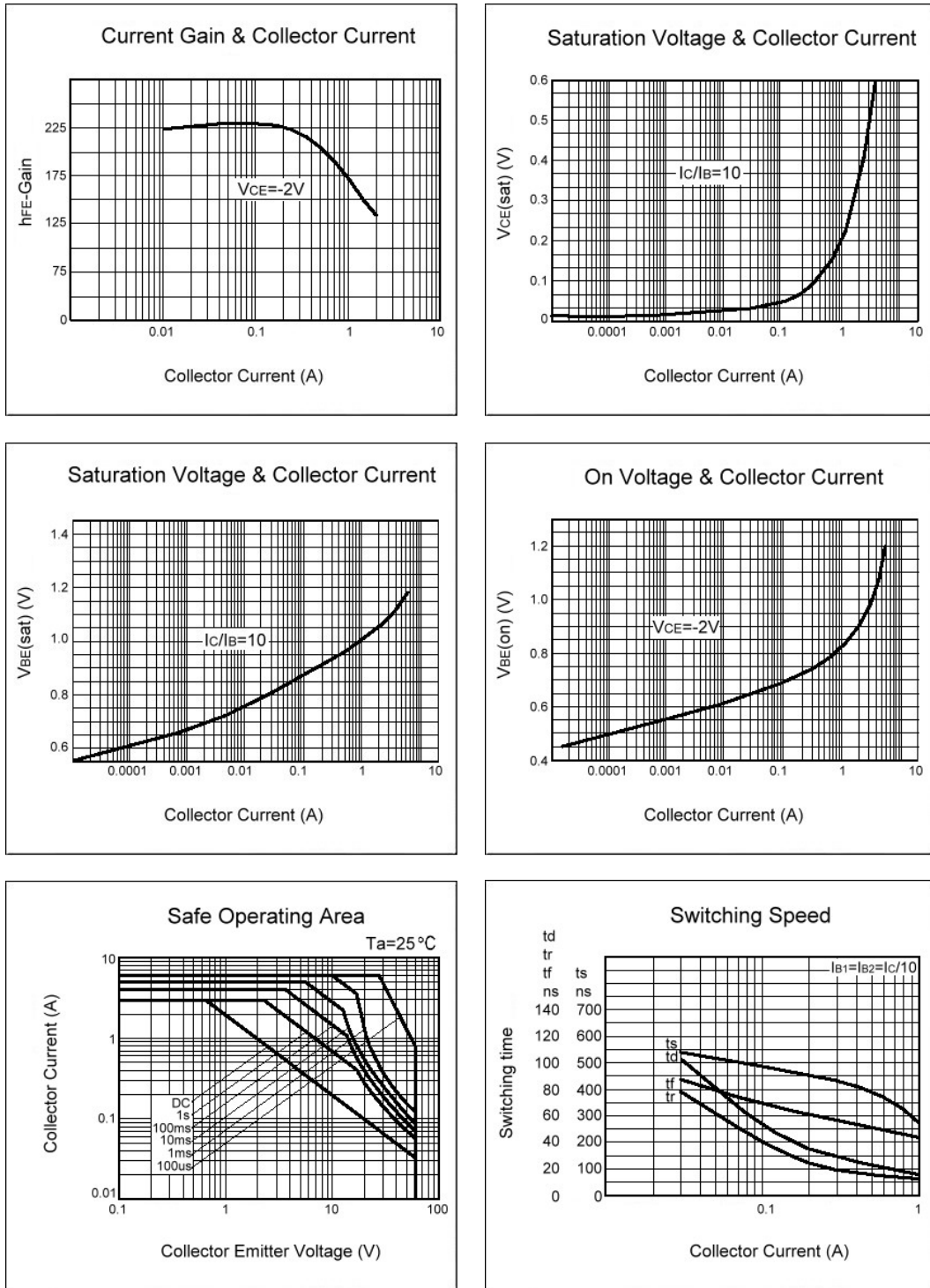
Electrical Characteristics ($T_a = 25^\circ\text{C}$, unless otherwise noted)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
V_{CB0}	-80	-	-	V	$I_c = -100\mu\text{A}$, $I_E = 0$
* V_{CE0}	-60	-	-	V	$I_c = -10\text{mA}$, $I_B = 0$
V_{EBO}	-5	-	-	V	$I_E = -100\mu\text{A}$, $I_c = 0$
I_{CB0}	-	-	-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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