

## GJ1182

### PNP SILICON EPITAXIAL PLANAR TRANSISTOR

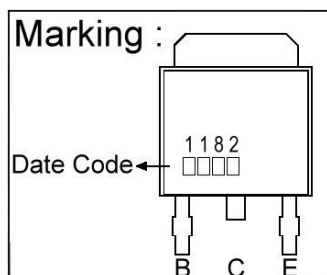
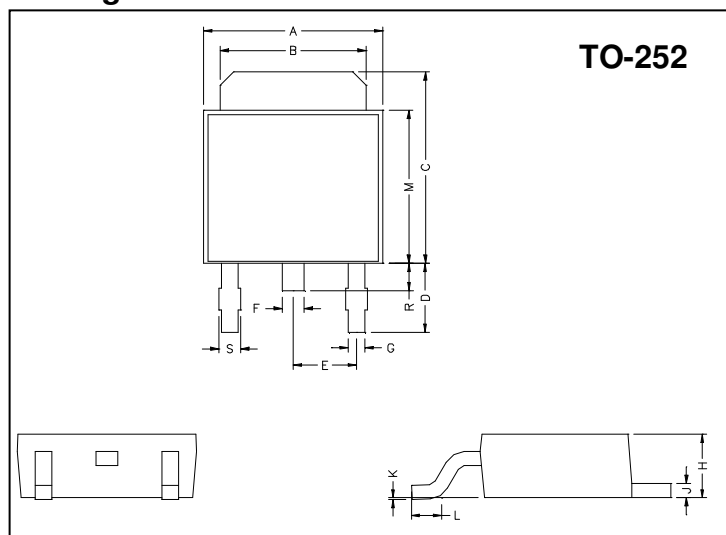
#### Description

The GJ1182 is designed for medium power amplifier applications.

#### Features

- Low collector saturation voltage :  $V_{CE(sat)} = -0.5V$  (Typ.)

#### Package Dimensions



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	6.40	6.80	G	0.50	0.70
B	5.20	5.50	H	2.20	2.40
C	6.80	7.20	J	0.45	0.55
D	2.40	3.00	K	0	0.15
E	2.30 REF.		L	0.90	1.50
F	0.70	0.90	M	5.40	5.80
S	0.60	0.90	R	0.80	1.20

#### 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	$V_{CBO}$	-40	V
Collector to Emitter Voltage	$V_{CEO}$	-32	V
Emitter to Base Voltage	$V_{EBO}$	-5	V
Collector Current	$I_C$	-2	A
Collector Current (Pulse, $P_w=100\text{ms}$ )	$I_C$	-3	A
Total Power Dissipation ( $T_c=25^\circ\text{C}$ )	$P_D$	10	W

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

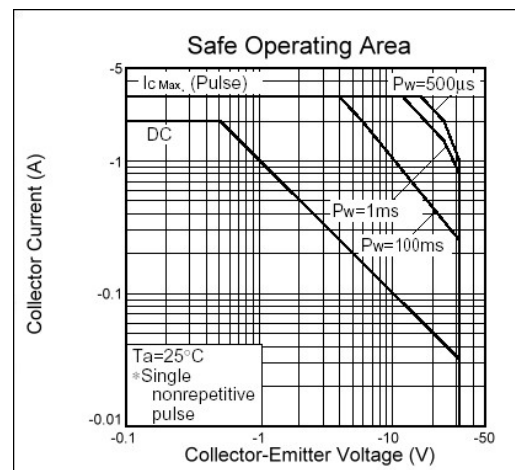
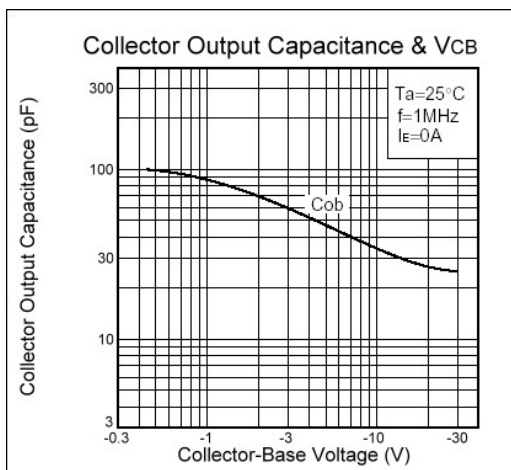
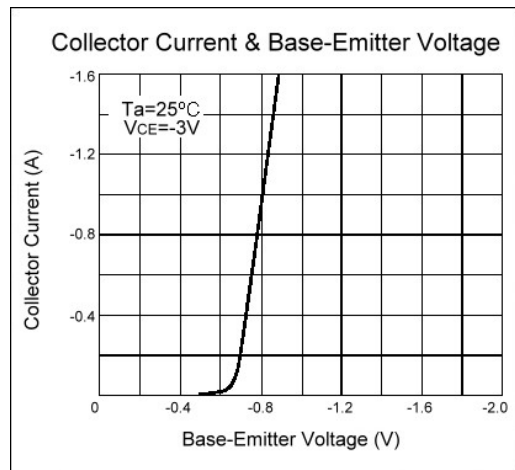
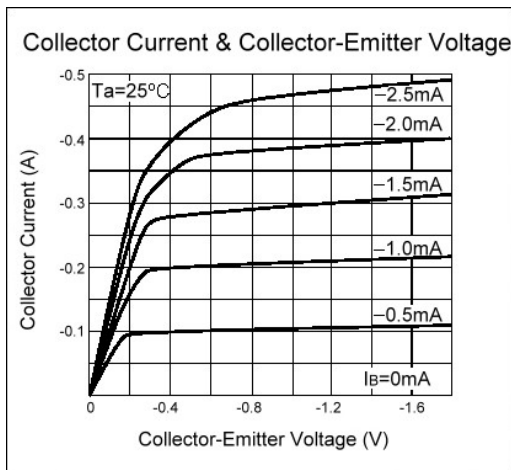
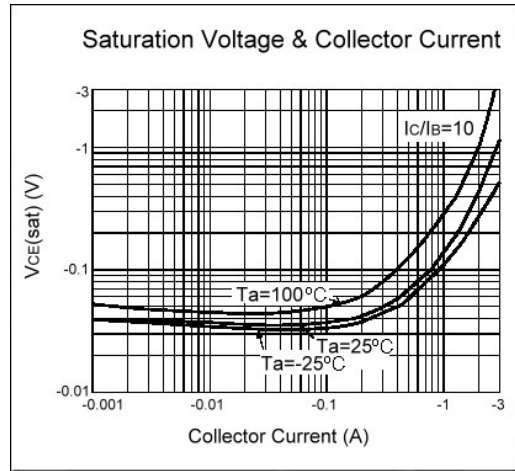
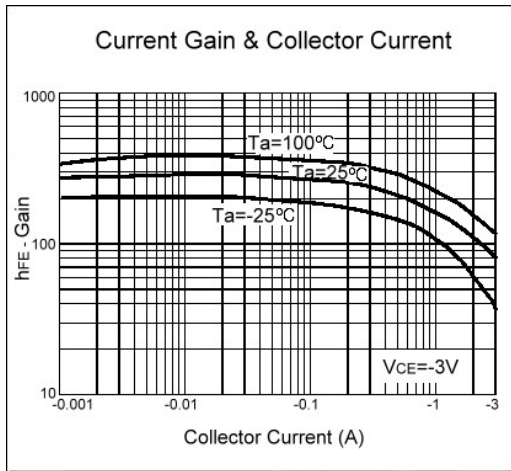
Symbol	Min.	Typ.	Max.	Unit	Test Conditions
$V_{CBO}$	-40	-	-	V	$I_C = -50\mu\text{A}$ , $I_E = 0$
$V_{CEO}$	-32	-	-	V	$I_C = -1\text{mA}$ , $I_B = 0$
$V_{EBO}$	-5	-	-	V	$I_E = -50\mu\text{A}$ , $I_C = 0$
$I_{CBO}$	-	-	-1	$\mu\text{A}$	$V_{CB} = -20\text{V}$ , $I_E = 0$
$I_{EBO}$	-	-	-1	$\mu\text{A}$	$V_{EB} = -4\text{V}$ , $I_C = 0$
* $V_{CE(sat)}$	-	-500	-800	mV	$I_C = -2\text{A}$ , $I_B = -200\text{mA}$
* $h_{FE}$	82	-	390		$V_{CE} = -3\text{V}$ , $I_C = -500\text{mA}$
$f_T$	-	100	-	MHz	$V_{CE} = -5\text{V}$ , $I_C = -500\text{mA}$ , $f = 100\text{MHz}$
$C_{ob}$	-	50	-	pF	$V_{CB} = -10\text{V}$ , $I_E = 0$ , $f = 1\text{MHz}$

\* Pulse Test: Pulse Width  $\leq 380\mu\text{s}$ , Duty Cycle  $\leq 2\%$

#### Classification Of $h_{FE}$

Rank	P	Q	R
Range	82 ~ 180	120 ~ 270	180 ~ 390

## Characteristics Curve



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