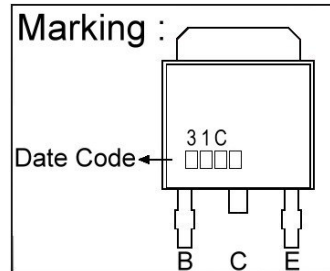
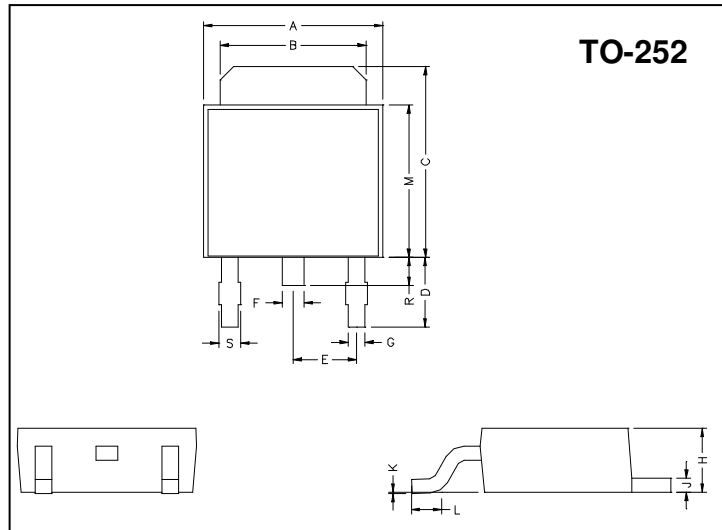


GJ31C**NPN EPITAXIAL PLANAR TRANSISTOR****Description**

The GJ31C is designed for use in general purpose amplifier and switching applications.

Features

*Complementary to GJ32C

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

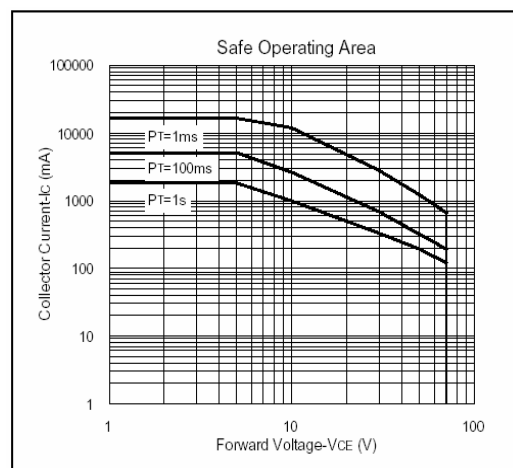
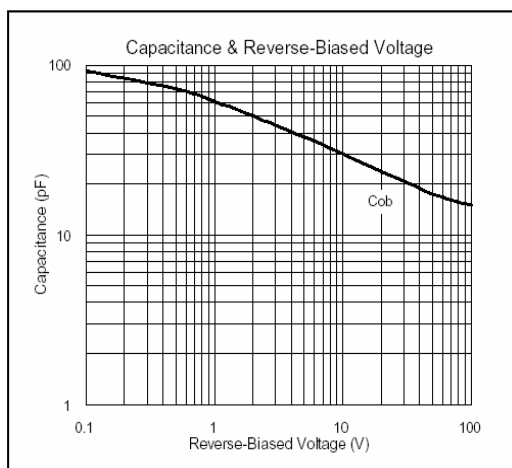
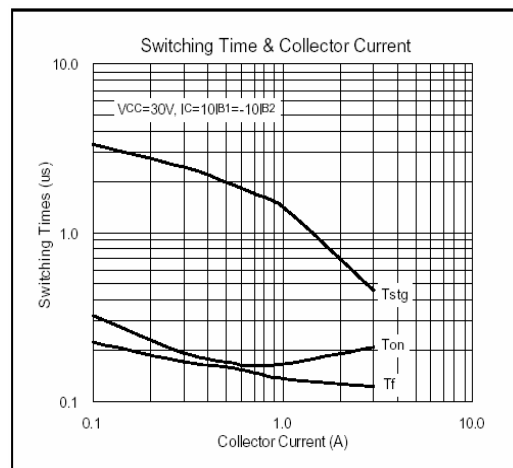
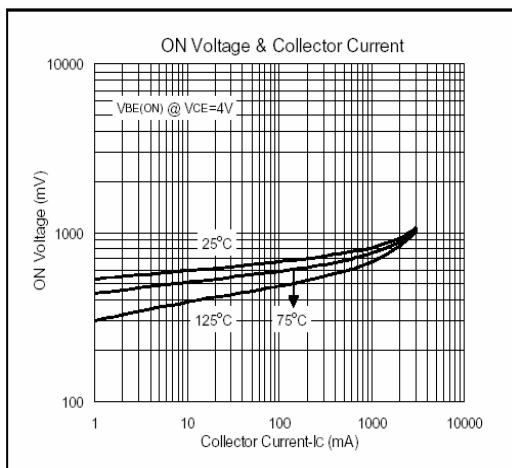
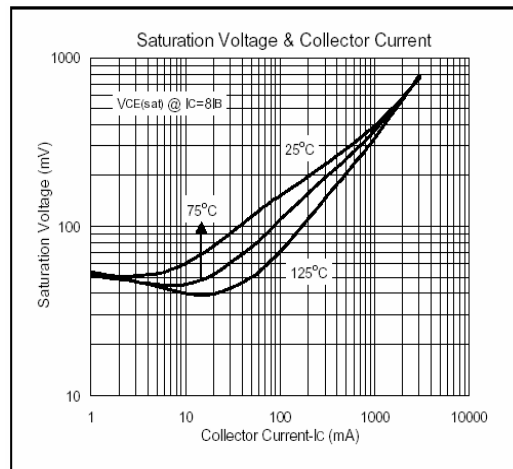
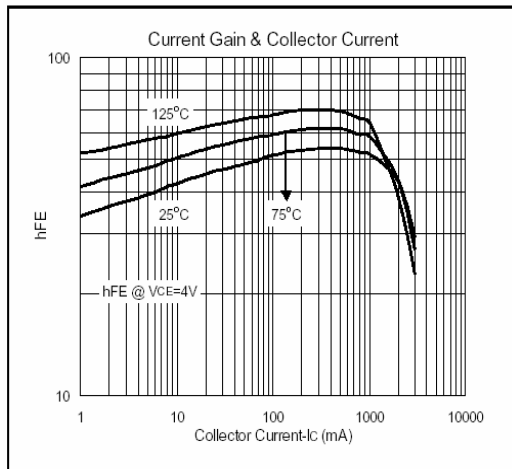
Parameter	Symbol	Ratings	Unit
Collector to Base Voltage	V_{CB0}	100	V
Collector to Emitter Voltage	V_{CE0}	100	V
Emitter to Base Voltage	V_{EB0}	5	V
Collector Current (DC)	I_C	3	A
Collector Current (Pulse)	I_C	5	A
Junction Temperature	T_j	+150	$^\circ\text{C}$
Storage Temperature	T_{STG}	-55 ~ +150	$^\circ\text{C}$
Total Power Dissipation	P_D	2	W
	$P_D(T_C=25^\circ\text{C})$	15	W

Electrical Characteristics (Rating at $T_a=25^\circ\text{C}$)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BV_{CB0}	100	-	-	V	$I_C=1\text{mA}$, $I_E=0$
BV_{CE0}	100	-	-	V	$I_C=30\text{mA}$, $I_B=0$
BV_{EB0}	5	-	-	V	$I_E=100\mu\text{A}$, $I_C=0$
I_{CES}	-	-	20	μA	$V_{CE}=100\text{V}$, $V_{EB}=0\text{V}$
I_{CEO}	-	-	50	μA	$V_{CE}=60\text{V}$, $I_B=0$
I_{EBO}	-	-	1	mA	$V_{EB}=5\text{V}$, $I_C=0$
$*V_{CE(sat)}$	-	-	1.2	V	$I_C=3\text{A}$, $I_B=375\text{mA}$
$*V_{BE(on)}$	-	-	1.8	V	$V_{CE}=4\text{V}$, $I_C=3\text{A}$
$*h_{FE1}$	25	-	-		$V_{CE}=4\text{V}$, $I_C=1\text{A}$
$*h_{FE2}$	10	-	50		$V_{CE}=4\text{V}$, $I_C=3\text{A}$
f_T	3	-	-	MHz	$V_{CE}=10\text{V}$, $I_C=500\text{mA}$, $f=1\text{MHz}$

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

Characteristics Curve



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