

## GJ41C

### NPN EPITAXIAL PLANAR TRANSISTOR

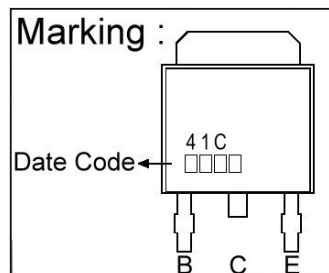
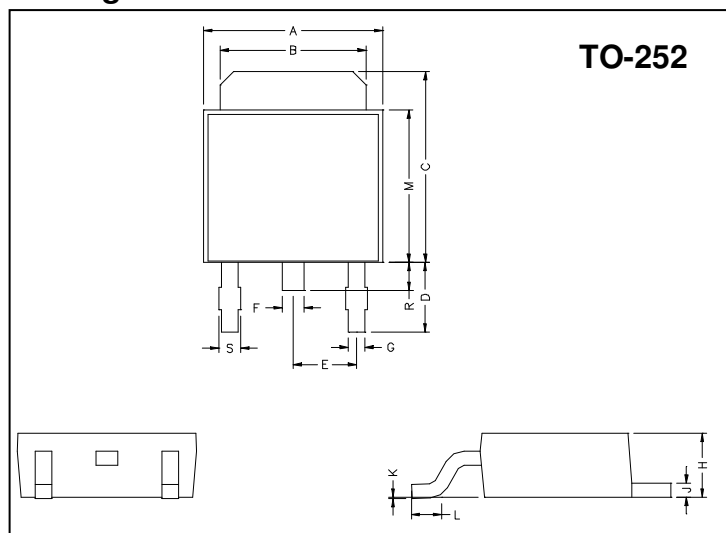
#### Description

The GJ41C is designed for use in general purpose amplifier and switching applications.

#### Features

\*Complementary to GJ42C

#### 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 (Ta = 25°C, unless otherwise specified)

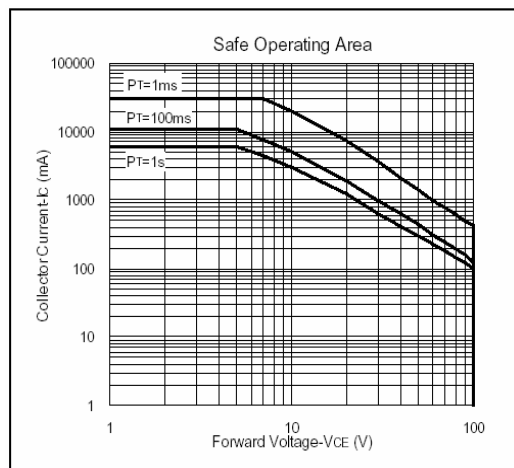
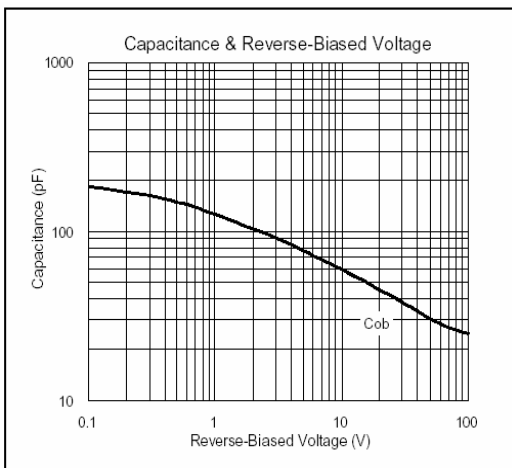
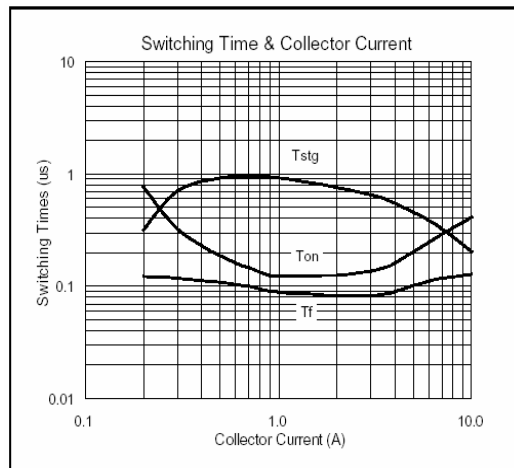
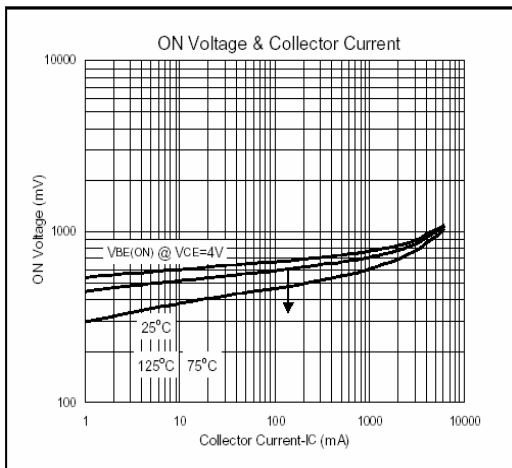
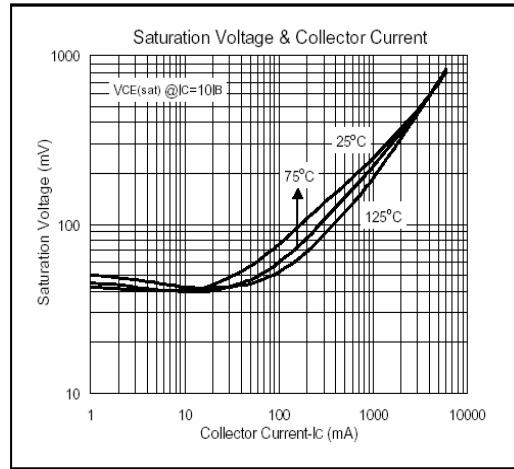
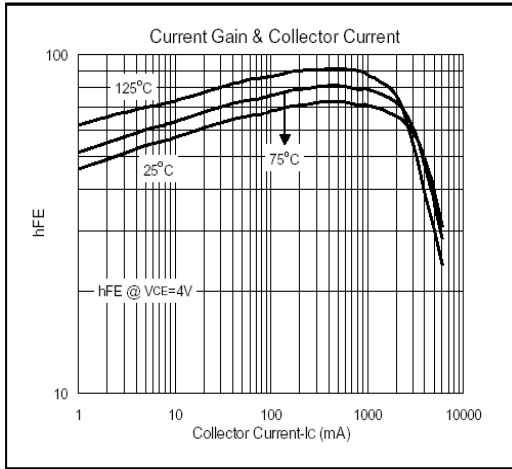
Parameter	Symbol	Ratings	Unit
Collector to Base Voltage	V <sub>CBO</sub>	100	V
Collector to Emitter Voltage	V <sub>CEO</sub>	100	V
Emitter to Base Voltage	V <sub>EBO</sub>	5	V
Collector Current (DC)	I <sub>C</sub>	6	A
Collector Current (Pulse)	I <sub>C</sub>	10	A
Junction Temperature	T <sub>j</sub>	+150	°C
Storage Temperature	T <sub>STG</sub>	-55 ~ +150	°C
Total Power Dissipation	P <sub>D</sub>	2	W
	P <sub>D</sub> (T <sub>C</sub> =25°C)	20	W

#### Electrical Characteristics (Rating at Ta=25°C)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
V <sub>CBO</sub>	100	-	-	V	I <sub>C</sub> =1mA, I <sub>E</sub> =0
V <sub>CEO</sub>	100	-	-	V	I <sub>C</sub> =30mA, I <sub>B</sub> =0
V <sub>EBO</sub>	5	-	-	V	I <sub>E</sub> =1mA, I <sub>C</sub> =0
I <sub>CES</sub>	-	-	10	uA	V <sub>CE</sub> =100V, V <sub>EB</sub> =0V
I <sub>CEO</sub>	-	-	50	uA	V <sub>CE</sub> =60V, I <sub>B</sub> =0
I <sub>EBO</sub>	-	-	500	uA	V <sub>EB</sub> =5V, I <sub>C</sub> =0
*V <sub>CE(sat)</sub>	-	-	1.5	V	I <sub>C</sub> =6A, I <sub>B</sub> =600mA
*V <sub>BE(on)</sub>	-	-	2.0	V	V <sub>CE</sub> =4V, I <sub>C</sub> =6A
*h <sub>FE1</sub>	30	-	-		V <sub>CE</sub> =4V, I <sub>C</sub> =300mA
*h <sub>FE2</sub>	15	-	75		V <sub>CE</sub> =4V, I <sub>C</sub> =3A
f <sub>T</sub>	3	-	-	MHz	V <sub>CE</sub> =10V, I <sub>C</sub> =500mA, f=1MHz

\* Pulse Test: Pulse Width ≤ 380μs, Duty Cycle ≤ 2%

## Characteristics Curve



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