

# 2N6543

Silicon NPN Transistors

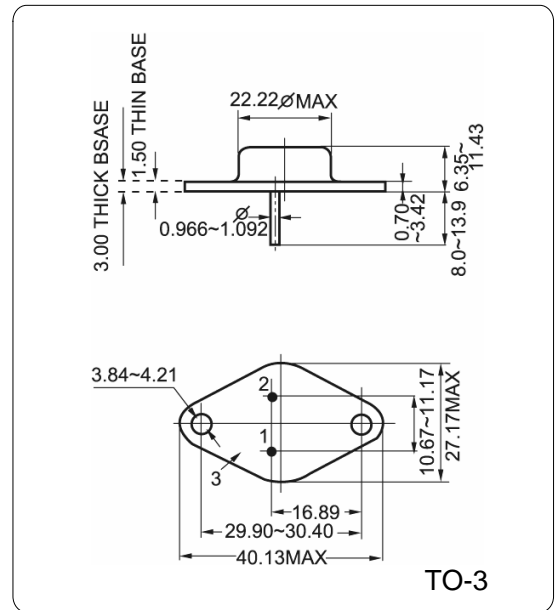


## ◆ Features

- Intended for high voltage, fast switching applications
- With TO-3 package

## ◆ Absolute Maximum Ratings Tc=25°C

SYMBOL	PARAMETER	RATING	UNIT
V <sub>CBO</sub>	Collector to base voltage	850	V
V <sub>CEO</sub>	Collector to emitter voltage	400	V
V <sub>EBO</sub>	Emitter to base voltage	9.0	V
I <sub>CP</sub>	Peak collector current	16	A
I <sub>C</sub>	Collector current	5.0	A
P <sub>C</sub>	Collector power dissipation	100	W
T <sub>j</sub>	Junction temperature	200	°C
T <sub>stg</sub>	Storage temperature	-65~200	°C



## ◆ Electrical Characteristics Tc=25°C

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
I <sub>CBO</sub>	Collector-base cut-off current	V <sub>CB</sub> =850V, V <sub>BE</sub> =0		0.5	mA
I <sub>EBO</sub>	Emitter-base cut-off current	V <sub>EB</sub> =9V; I <sub>C</sub> =0		1.0	mA
I <sub>CEO</sub>	Collector-emitter cut-off current				
V <sub>CBO</sub>	Collector-base breakdown voltage				
V <sub>(BR)CEO</sub>	Collector-emitter breakdown voltage	I <sub>C</sub> =100mA, I <sub>B</sub> =0	400		V
V <sub>EBO</sub>	Emitter-base breakdown voltage				
V <sub>CEsat-1</sub>	Collector-emitter saturation voltages	I <sub>C</sub> =5A; I <sub>B</sub> =1A		1.5	V
V <sub>CEsat-2</sub>	Collector-emitter saturation voltages	I <sub>C</sub> =8A; I <sub>B</sub> =2A		5.0	V
V <sub>CEsat-3</sub>	Collector-emitter saturation voltages				
V <sub>CEsat-4</sub>	Collector-emitter saturation voltages				
h <sub>FE-1</sub>	Forward current transfer ratio	I <sub>C</sub> =2.5A, V <sub>CE</sub> =3V	12	60	
h <sub>FE-2</sub>	Forward current transfer ratio	I <sub>C</sub> =5A, V <sub>CE</sub> =3V	7.0	35	
h <sub>FE-3</sub>	Forward current transfer ratio				
h <sub>FE-4</sub>	Forward current transfer ratio				
V <sub>BE(sat)1</sub>	Base-emitter saturation voltages	I <sub>C</sub> =5A; I <sub>B</sub> =1A		1.6	V
V <sub>BE(sat)2</sub>	Base-emitter saturation voltages				
V <sub>BE(sat)3</sub>	Base-emitter saturation voltages				
f <sub>T</sub>	Transition frequency at f = 1MHz	I <sub>C</sub> =0.3A, V <sub>CE</sub> =10V	6.0	24	MHz
t <sub>f</sub>	Fall time				
t <sub>s</sub>	Turn-off storage time				