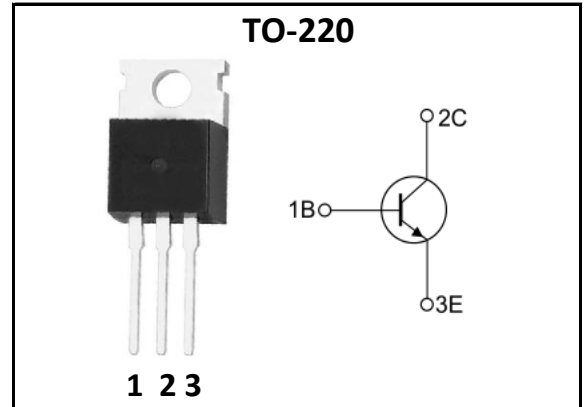


# 13007

## Silicon NPN Transistor

### Features

1. High Voltage
2. High Speed Switching



### Maximum ratings(Ta=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Collector-Base Breakdown Voltage	V <sub>CBO</sub>	700	V
Collector-Emitter Breakdown Voltage	V <sub>CEO</sub>	400	V
Emitter-Base Breakdown Voltage	V <sub>EBO</sub>	9	V
Collector Current	I <sub>C</sub>	8	A
Collector Power Dissipation	P <sub>C</sub>	2	W
Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature	T <sub>stg</sub>	-55~150	°C

### Electrical Characteristics (Ta=25°C unless otherwise noted)

Parameter	Symbol	Test Condition	Min	Max	Unit
Collector-Base Breakdown Voltage	V <sub>CBO</sub>	I <sub>C</sub> =100uA I <sub>E</sub> =0	700		V
Collector-Emitter Breakdown Voltage	V <sub>CEO</sub>	I <sub>C</sub> =1mA I <sub>B</sub> =0	400		V
Emitter-Base Breakdown Voltage	V <sub>EBO</sub>	I <sub>E</sub> =100uA I <sub>C</sub> =0	9		V
Collector Cutoff Current	I <sub>CBO</sub>	V <sub>CB</sub> =700V I <sub>E</sub> =0		1	uA
Collector Cutoff Current	I <sub>CEO</sub>	V <sub>CE</sub> =400V I <sub>B</sub> =0		1	uA
Emitter Cutoff Current	I <sub>EBO</sub>	V <sub>EB</sub> =9V I <sub>C</sub> =0		1	uA
DC Current Gain	H <sub>FE</sub>	V <sub>CE</sub> =5V I <sub>C</sub> =2A	10	40	
		V <sub>CE</sub> =5V I <sub>C</sub> =5A	5		
Collector-Emitter Saturation Voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =2A I <sub>B</sub> =400mA		1	V
Base-Emitter Saturation Voltage	V <sub>BE(sat)</sub>	I <sub>C</sub> =2A I <sub>B</sub> =400mA		1.2	V
Storage time	T <sub>s</sub>	I <sub>C</sub> =500mA	3	6	
Transition frequency	f <sub>T</sub>	V <sub>CE</sub> =10V I <sub>C</sub> =500mA	4		MHz