



**TO-126 Plastic-Encapsulate Transistors**

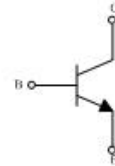
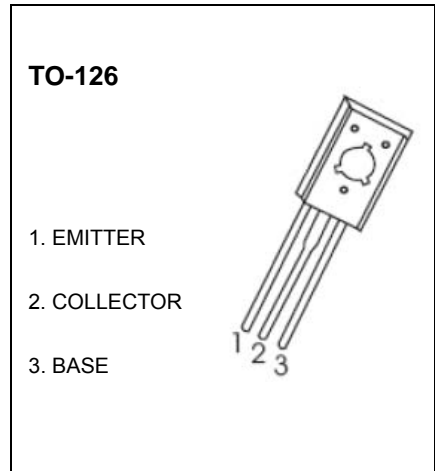
**C 2611** TRANSISTOR (NPN)

**FEATURE**

power switching applications

**MAXIMUM RATINGS (Ta=25°C unless otherwise noted)**

Symbol	Parameter	Value	Unit
V <sub>CB0</sub>	Collector -Base Voltage	600	V
V <sub>CEO</sub>	Collector-Emitter Voltage	400	V
V <sub>EBO</sub>	Emitter-Base Voltage	7	V
I <sub>C</sub>	Collector Current -Continuous	0.2	A
P <sub>C</sub>	Collector Power Dissipation	1	W
T <sub>J</sub>	Junction Temperature	150	°C
T <sub>stg</sub>	Storage Temperature	-55~150	°C



**ELECTRICAL CHARACTERISTICS (Ta=25°C unless otherwise specified)**

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V <sub>(BR)CBO</sub>	I <sub>C</sub> = 100μA, I <sub>E</sub> =0	600			V
Collector-emitter breakdown voltage	V <sub>(BR)CEO</sub>	I <sub>C</sub> = 1mA, I <sub>B</sub> =0	400			V
Emitter-base breakdown voltage	V <sub>(BR)EBO</sub>	I <sub>E</sub> = 100μA, I <sub>C</sub> =0	7			V
Collector cut-off current	I <sub>CBO</sub>	V <sub>CB</sub> = 600V, I <sub>E</sub> =0			100	μA
Collector cut-off current	I <sub>CEO</sub>	V <sub>CE</sub> = 400V, I <sub>B</sub> =0			200	μA
Emitter cut-off current	I <sub>EBO</sub>	V <sub>EB</sub> =7V, I <sub>C</sub> =0			100	μA
DC current gain	h <sub>FE(1)</sub>	V <sub>CE</sub> =20V, I <sub>C</sub> =20mA	10		40	
	h <sub>FE(2)</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> = 0.25mA	5			
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> = 50mA, I <sub>B</sub> = 10mA			0.5	V
		I <sub>C</sub> = 100mA, I <sub>B</sub> = 20mA			0.6	V
Base-emitter saturation voltage	V <sub>BE(sat)</sub>	I <sub>C</sub> = 50mA, I <sub>B</sub> =10mA			1.2	V
Transition frequency	f <sub>T</sub>	V <sub>CE</sub> =20V, I <sub>C</sub> =20mA f = 1MHz	8			MHz
Fall time	t <sub>S</sub>	I <sub>C</sub> =50mA, I <sub>B1</sub> =-I <sub>B2</sub> =5mA, V <sub>CC</sub> =45V			0.3	μs
Storage time	t <sub>f</sub>				1.5	μs

**CLASSIFICATION OF h<sub>FE(1)</sub>**

Rank						
Range	10-15	15-20	20-25	25-30	30-35	35-40