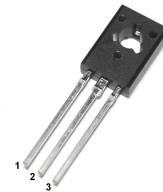


D4126

NPN Silicon Transistor

High Voltage Switch Mode Application

DRAWING



1. Base 2. Collector 3. Emitter

Features

- ③ High Voltage Capability
- ③ High Speed Switching
- ③ Suitable for Switching Regulator and Motor Control
- ③ Case:TO-126

Absolute Maximum Ratings (Ta=25°C unless otherwise noted)

Symbol	Parameter	Value	Units
V <sub>CBO</sub>	Collector-Base Voltage	700	V
V <sub>CEO</sub>	Collector-Emitter Voltage	400	V
V <sub>EBO</sub>	Emitter-Base Voltage	9	V
I <sub>C</sub>	Collector Current(DC)	1.5	A
I <sub>CP</sub>	Collector Current(Pulse)	4.5	A
I <sub>B</sub>	Base Current	0.75	A
P <sub>C</sub>	Collector Dissipation	1.25	W
T <sub>J</sub>	Junction Temperature	150	°C
T <sub>STG</sub>	Storage Temperature	-65~150	°C

Electrical Characteristics (Tc=25°C unless otherwise noted)

Symbol	Parameter	Conditions	Min	Typ	Max	Units
BV <sub>CEO</sub>	Collector-Emitter Breakdown Voltage	I <sub>C</sub> =1mA, I <sub>B</sub> =0	400			V
I <sub>EBO</sub>	Emitter Cut-off Current	V <sub>EB</sub> =9V, I <sub>C</sub> =0			1	mA
h <sub>fe1</sub>	DC Current Gain	V <sub>CE</sub> =5V, I <sub>C</sub> =1mA	6		50	
h <sub>fe2</sub>		V <sub>CE</sub> =5V, I <sub>C</sub> =0.5A	30	35	50	
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> =0.5A, I <sub>B</sub> =0.1A			0.45	V
		I <sub>C</sub> =1.5A, I <sub>B</sub> =0.3A			0.95	V
V <sub>BE(sat)</sub>	Base-Emitter Saturation Voltage	I <sub>C</sub> =0.5A, I <sub>B</sub> =0.1A			0.95	V
		I <sub>C</sub> =1.5A, I <sub>B</sub> =0.3A			1.20	V
f <sub>T</sub>	Current Gain Bandwidth Product	V <sub>CE</sub> =10V, I <sub>C</sub> =0.5A	4			MHz
C <sub>ob</sub>	Output Capacitance	V <sub>CB</sub> =10V, F=0.1MHZ		110		PF
t <sub>on</sub>	Turn On time	V <sub>CC</sub> =125V, I <sub>C</sub> =0.5A I <sub>B1</sub> =-I <sub>B2</sub> =1A R <sub>L</sub> =50Ω,			1.6	us
t <sub>STG</sub>	Storage Time				3	us
t <sub>F</sub>	Fall Time				0.7	us

Pulse Test:PW≤300us,Duty Cycle≤2%

