

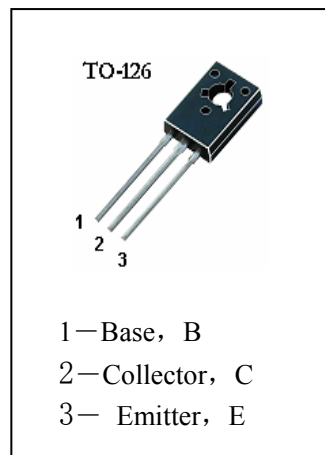


■ HIGH VOLTAGE SWITCH MODE APPLICATIONS

High Speed Switching
 Suitable for Switching Regulator and Motor Control

■ ABSOLUTE MAXIMUM RATINGS (T_a=25°C)

- T_{stg}—Storage Temperature..... -65~150°C
- T_j—Junction Temperature.....150°C
- P_C—Collector Dissipation.....30W
- V_{CBO}—Collector-Base Voltage.....600V
- V_{CEO}—Collector-Emitter Voltage.....400V
- V_{EBO}—Emitter-Base Voltage.....9V
- I_C—Collector Current.....1.5A



1—Base, B
 2—Collector, C
 3— Emitter, E

■ ELECTRICAL CHARACTERISTICS (T_a=25°C)

Symbol	Characteristics	Min	Typ	Max	Unit	Test Conditions
BV _{CBO}	Collector-Base Breakdown Voltage	600			V	I _C =1mA, I _E =0
BV _{CEO}	Collector-Emitter Breakdown Voltage	400			V	I _C =10mA, I _B =0
BV _{EBO}	Emitter-Base Breakdown Voltage	9			V	I _E =1mA, I _C =0
h _{FE}	DC Current Gain	10		40		V _{CE} =10V, I _C =0.1A
V _{CE(sat)1}	Collector- Emitter Saturation Voltage			0.8	V	I _C =1A, I _B =500mA
V _{CE(sat)2}	Collector- Emitter Saturation Voltage			0.8	V	I _C =0.5A, I _B =100mA
V _{BE(sat)}	Base-Emitter Saturation Voltage			1.2	V	I _C =0.5A, I _B =100mA
I _{CBO}	Collector Cut-off Current			10	μ A	V _{CB} =500V, I _E =0
I _{EBO}	Emitter-Base Cut-off Current			10	μ A	V _{EB} =9V, I _C =0
f _T	Current Gain-Bandwidth Product	8			MHz	V _{CE} =10V, I _C =0.1A, f=1MHz
t _{ON}	Turn On Time			1.1	μ s	V _{CC} =125V, I _C =1A, I _{B1} =0.2A, I _{B2} =-0.2A R _L =125 Ω
t _{STG}	Storage Time			4.0	μ s	
t _F	Fall Time			0.7	μ s	

■ h_{FE} Classification

H1	H2	H3	H4	H5
10-16	14-21	19-26	24-31	29-40