

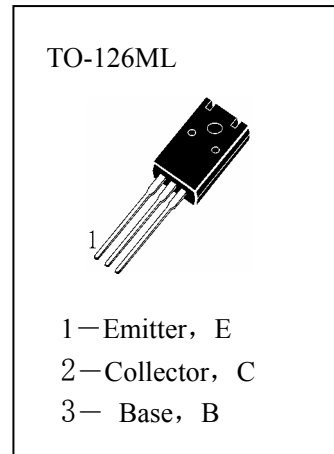


■ HIGH VOLTAGE SWITCH MODE APPLICATIONS

High Speed Switching. Suitable for Switching Regulator and Motor Control

■ ABSOLUTE MAXIMUM RATINGS (T<sub>a</sub>=25°C)

- T<sub>stg</sub>—Storage Temperature..... -65~150°C
- T<sub>j</sub>—Junction Temperature.....150°C
- P<sub>C</sub>—Collector Dissipation.....40W
- V<sub>CB0</sub>—Collector-Base Voltage.....700V
- V<sub>CEO</sub>—Collector-Emitter Voltage.....400V
- V<sub>EBO</sub>—Emitter-Base Voltage.....9V
- I<sub>C</sub>—Collector Current.....1.5A
- I<sub>B</sub>—Base Current.....0.75A



■ ELECTRICAL CHARACTERISTICS (T<sub>a</sub>=25°C)

Symbol	Characteristics	Min	Typ	Max	Unit	Test Conditions
BV <sub>CEO</sub>	Collector-Emitter Breakdown Voltage	400			V	I <sub>C</sub> =5mA, I <sub>B</sub> =0
I <sub>EBO</sub>	Emitter-Base Cut-off Current			10	μ A	V <sub>EB</sub> =9V, I <sub>C</sub> =0
H <sub>FE1</sub>	DC Current Gain	10		40		V <sub>CE</sub> =5V, I <sub>C</sub> =0.5A
H <sub>FE2</sub>	DC Current Gain	5				V <sub>CE</sub> =2V, I <sub>C</sub> =1A
V <sub>CE(sat)1</sub>	Collector- Emitter Saturation Voltage			0.5	V	I <sub>C</sub> =0.5A, I <sub>B</sub> =0.1A
V <sub>CE(sat)2</sub>	Collector- Emitter Saturation Voltage			1	V	I <sub>C</sub> =1A, I <sub>B</sub> =0.25A
V <sub>CE(sat)3</sub>	Collector- Emitter Saturation Voltage			3	V	I <sub>C</sub> =1.5A, I <sub>B</sub> =0.5A
V <sub>BE(sat)1</sub>	Base-Emitter Saturation Voltage			1	V	I <sub>C</sub> =0.5A, I <sub>B</sub> =0.1A
V <sub>BE(sat)2</sub>	Base-Emitter Saturation Voltage			1.2	V	I <sub>C</sub> =1A, I <sub>B</sub> =0.25A
f <sub>T</sub>	Current Gain-Bandwidth Product	4			MHz	V <sub>CE</sub> =10V, I <sub>C</sub> =0.1A
t <sub>ON</sub>	Turn On Time			1.1	μ s	V <sub>CC</sub> =125V, I <sub>C</sub> =1A, I <sub>B1</sub> =0.2A, I <sub>B2</sub> =-0.2A R <sub>L</sub> =125 Ω
t <sub>STG</sub>	Storage Time			4.0	μ s	
t <sub>F</sub>	Fall Time			0.7	μ s	

■ h<sub>FE</sub> Classification

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

