

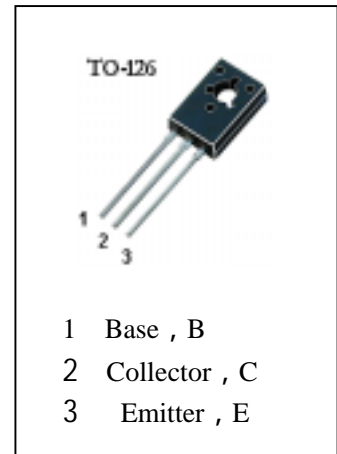


**HIGH VOLTAGE SWITCH MODE APPLICATIONS**

High Speed Switching. Suitable for Switching Regulator and Motor Control

**ABSOLUTE MAXIMUM RATINGS (  $T_a=25$  )**

- $T_{stg}$ —Storage Temperature..... -65~150
- $T_j$ —Junction Temperature..... 150
- $P_C$ —Collector Dissipation.....40W
- $V_{CBO}$ —Collector-Base Voltage.....700V
- $V_{CEO}$ —Collector-Emitter Voltage.....400V
- $V_{EBO}$ —Emitter-Base Voltage.....9V
- $I_C$ —Collector Current.....1.5A
- $I_B$ —Base Current.....0.75A



**ELECTRICAL CHARACTERISTICS (  $T_a=25$  )**

Symbol	Characteristics	Min	Typ	Max	Unit	Test Conditions
$BV_{CEO}$	Collector-Emitter Breakdown Voltage	400			V	$I_C=5mA, I_B=0$
$I_{EBO}$	Emitter-Base Cut-off Current			10	$\mu A$	$V_{EB}=9V, I_C=0$
$H_{FE1}$	DC Current Gain	10		40		$V_{CE}=5V, I_C=0.5A$
$H_{FE2}$	DC Current Gain	5				$V_{CE}=2V, I_C=1A$
$V_{CE(sat)1}$	Collector- Emitter Saturation Voltage			0.5	V	$I_C=0.5A, I_B=0.1A$
$V_{CE(sat)2}$	Collector- Emitter Saturation Voltage			1	V	$I_C=1A, I_B=0.25A$
$V_{CE(sat)3}$	Collector- Emitter Saturation Voltage			3	V	$I_C=1.5A, I_B=0.5A$
$V_{BE(sat)1}$	Base-Emitter Saturation Voltage			1	V	$I_C=0.5A, I_B=0.1A$
$V_{BE(sat)2}$	Base-Emitter Saturation Voltage			1.2	V	$I_C=1A, I_B=0.25A$
$f_T$	Current Gain-Bandwidth Product	4			MHZ	$V_{CE}=10V, I_C=0.1A$
$t_{ON}$	Turn On Time			1.1	$\mu s$	$V_{CC}=125V, I_C=1A,$ $I_{B1}=0.2A, I_{B2}=-0.2A$ $R_L=125$
$t_{STG}$	Storage Time			4.0	$\mu s$	
$t_F$	Fall Time			0.7	$\mu s$	

**$h_{FE}$  Classification**

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

