

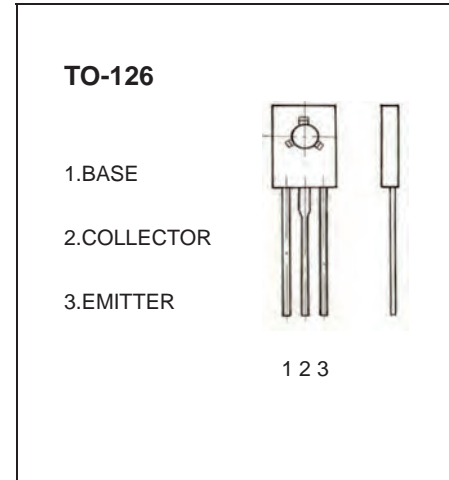
SWITCHING REGULATOR APPLICATION.  
HIGH VOLTAGE AND HIGH SPEED  
SWITCHING APPLICATION.

### FEATURES

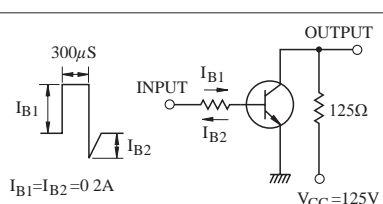
- Excellent Switching Times  
:  $t_{on}=1.1\mu S(\text{Max.})$ ,  $t_f=0.7\mu S(\text{Max.})$ , at  $I_C=1.5A$
- High Collector Voltage :  $V_{CBO}=700V$ .

### MAXIMUM RATING ( $T_a=25^\circ C$ )

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	$V_{CBO}$	700	V
Collector-Emitter Voltage	$V_{CEO}$	400	V
Emitter-Base Voltage	$V_{EBO}$	9	V
Collector Current	DC	$I_C$	A
	Pulse	$I_{CP}$	
Collector Power Dissipation	$I_B$	0.75	A
Collector Power Dissipation	$P_C$	1.5	W
Junction Temperature	$T_j$	150	$^\circ C$
Storage Temperature Range	$T_{stg}$	-55~150	$^\circ C$



### ELECTRICAL CHARACTERISTICS ( $T_a=25^\circ C$ )

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Emitter Cut-off Current	$I_{EBO}$	$V_{EB}=9V$ , $I_C=0$	-	-	1	mA
DC Current Gain	$h_{FE(1)}$ (Note)	$V_{CE}=5V$ , $I_C=0.5A$	8	-	40	
	$h_{FE(2)}$	$V_{CE}=5V$ , $I_C=1.5A$	5	-	-	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=1A$ , $I_B=0.25A$	-	-	0.6	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=1A$ , $I_B=0.25A$	-	-	1.2	V
Transition Frequency	$f_T$	$V_{CE}=10V$ , $I_C=0.1A$	5	-	-	MHz
Turn-On Time	$t_{on}$	 <p><math>I_{B1}=I_{B2}=0.2A</math> DUTY CYCLE <math>\leq 1\%</math></p>	-	-	1.0	$\mu S$
Storage Time	$t_{stg}$		-	-	4	$\mu S$
Fall Time	$t_f$		-	-	0.7	$\mu S$

Note :  $h_{FE}$  Classification A: 8~16, B: 14~21, C: 19~26, D: 24~31, E: 29~36, F: 34~40

