

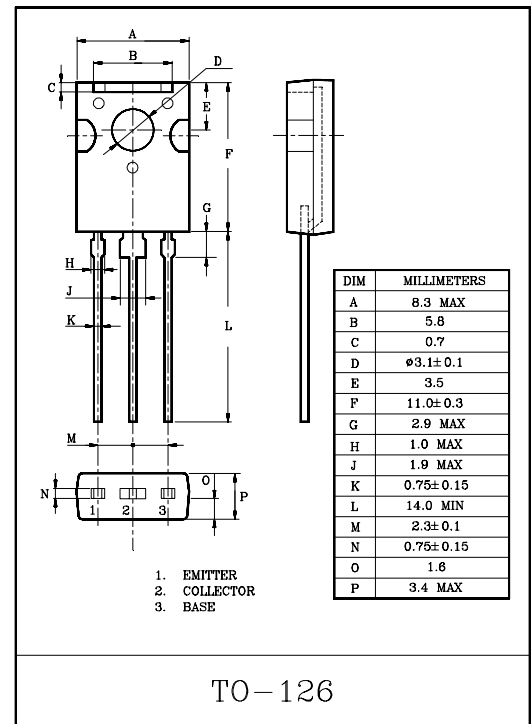
SWITCHING REGULATOR APPLICATION.
HIGH VOLTAGE AND HIGH SPEED
SWITCHING APPLICATION.

FEATURES

- Excellent Switching Times
: $t_{on}=1.1\mu S(\text{Max.})$, $t_f=0.7\mu S(\text{Max.})$, at $I_C=1A$
- High Collector Voltage : $V_{CBO}=700V$.

MAXIMUM RATINGS ($T_a=25^\circ C$)

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}	
Base Current	I_B	0.75	A
Collector Power Dissipation ($T_c=25^\circ C$)	P_C	20	W
Junction Temperature	T_j	150	$^\circ C$
Storage Temperature Range	T_{stg}	-65~150	$^\circ C$

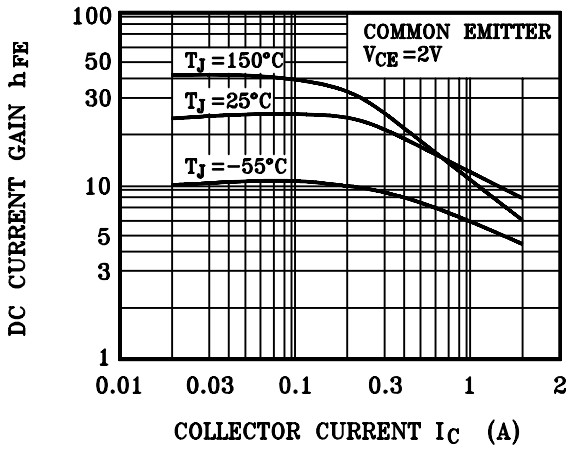


ELECTRICAL CHARACTERISTICS ($T_a=25^\circ C$)

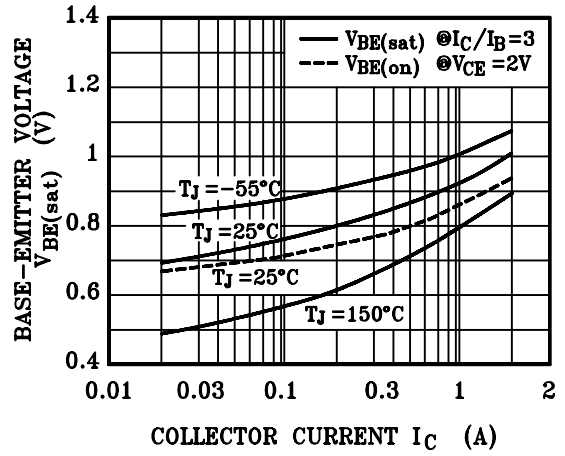
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT	
Emitter Cut-off Current	I_{EBO}	$V_{EB}=9V$, $I_C=0$	-	-	10	μA	
DC Current Gain	$h_{FE(1)}$ Note	$V_{CE}=2V$, $I_C=0.5A$	19	-	36		
	$h_{FE(2)}$	$V_{CE}=2V$, $I_C=1A$	5	-	25		
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=0.5A$, $I_B=0.1A$	-	-	0.5	V	
		$I_C=1A$, $I_B=0.25A$	-	-	1		
		$I_C=1.5A$, $I_B=0.5A$	-	-	3		
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=0.5A$, $I_B=0.1A$	-	-	1	V	
		$I_C=1A$, $I_B=0.25A$	-	-	1.2		
Collector Output Capacitance	C_{ob}	$V_{CB}=10V$, $f=0.1MHz$	-	21	-	pF	
Transition Frequency	f_T	$V_{CE}=10V$, $I_C=0.1A$	4	-	-	MHz	
Turn-On Time	t_{on}	<p>$I_{B1}=I_{B2}=0.2A$ DUTY CYCLE $\leq 2\%$</p>	-	-	1.1	μS	
Storage Time	t_{stg}		-	-	-	4.0	μS
Fall Time	t_f		-	-	-	0.7	μS

Note : $h_{FE(1)}$ Classification : O:19~28 , Y:26~36

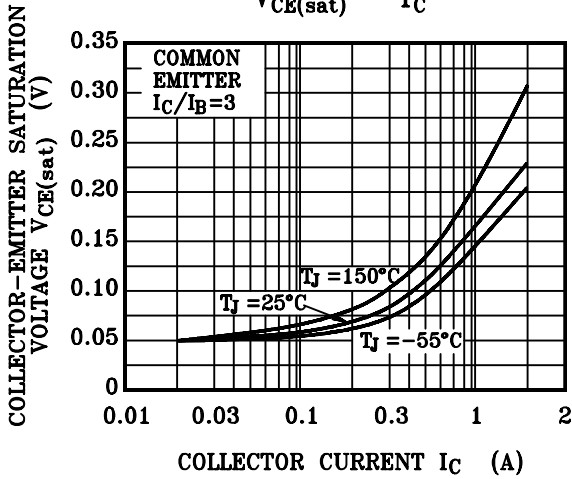
DC CURRENT GAIN



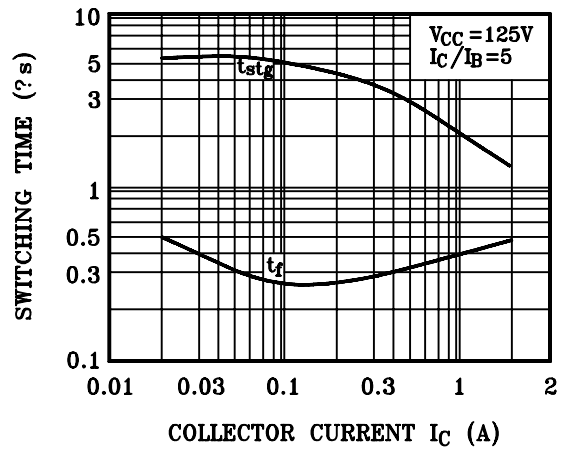
$V_{BE(sat)} - I_C$



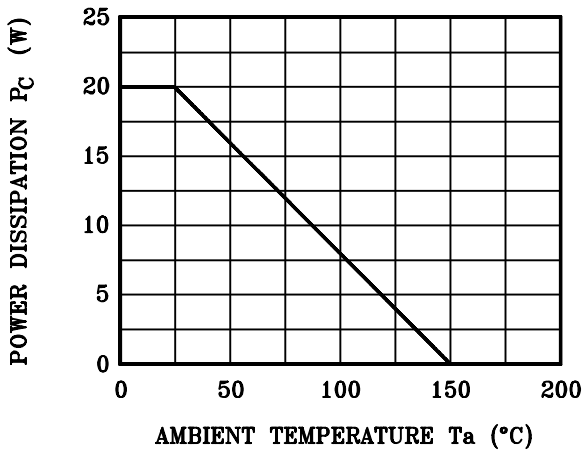
$V_{CE(sat)} - I_C$



SWITCHING CHARACTERISTIC



$P_c - T_a$



SAFE OPERATING AREA

