



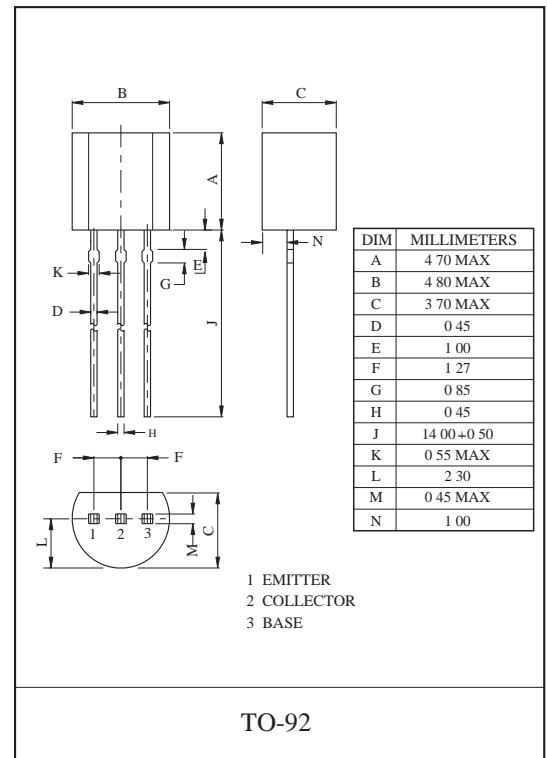
SWITCHING REGULATOR APPLICATION.
HIGH VOLTAGE AND HIGH SPEED
SWITCHING APPLICATION.

FEATURES

- Excellent Switching Times
: $t_{on}=0.5\mu S(\text{Max.})$, $t_f=0.7\mu S(\text{Max.})$, at $I_C=1A$
- 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	I_{CM}	1	A
Collector Power Dissipation	P_C	1	W
Junction Temperature	T_j	150	$^\circ C$
Storage Temperature Range	T_{stg}	-55~150	$^\circ C$



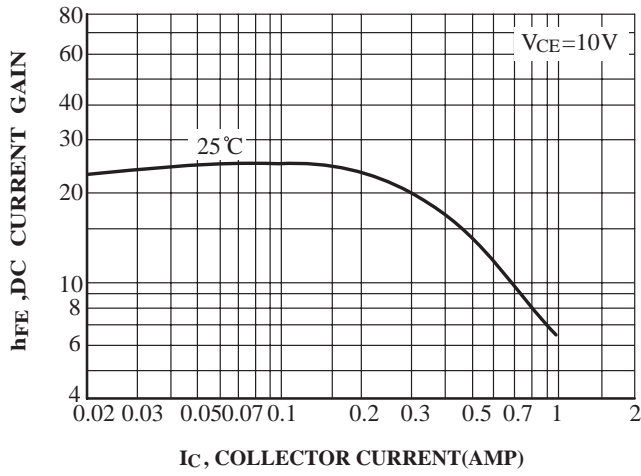
ELECTRICAL CHARACTERISTICS ($T_a=25^\circ C$)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Emitter Cut-off Current	I_{EBO}	$V_{EB}=9V$, $I_C=0$	-	-	10	μA
DC Current Gain	$h_{FE}(1)$	$V_{CE}=10V$, $I_C=10\mu$	5	-	-	
	$h_{FE}(2)$ (Note)	$V_{CE}=10V$, $I_C=100mA$	9	-	38	
	$h_{FE}(3)$	$V_{CE}=10V$, $I_C=500mA$	5	-	-	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=100mA$, $I_B=10mA$	-	-	0.45	V
		$I_C=200mA$, $I_B=20mA$	-	-	1	
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=50mA$, $I_B=10mA$	-	-	0.9	V
		$I_C=100mA$, $I_B=10mA$	-	-	1.1	
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 $\leq 1\%$</p>	-	-	0.5	μS
Storage Time	t_{stg}		-	-	5	μS
Fall Time	t_f		-	-	0.7	μS

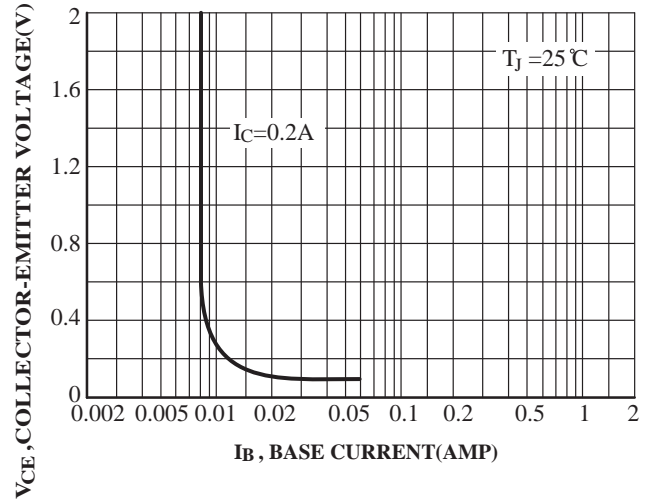
Note : h_{FE} Classification R:9~15, O:13~21, Y: 20~38



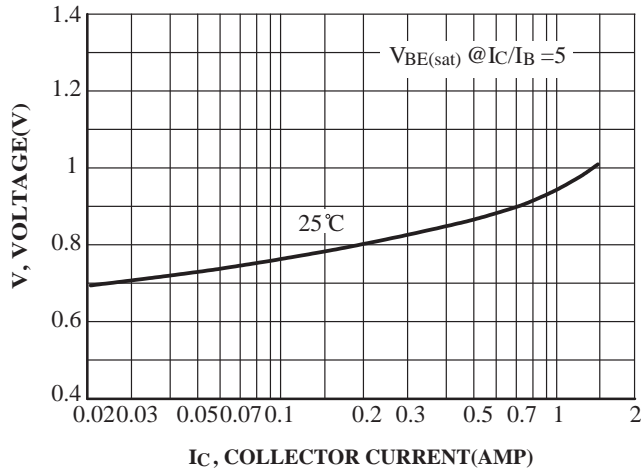
DC Current Gain



Collector Saturation



Base-Emitter Voltage



Collector-Emitter Saturation

