

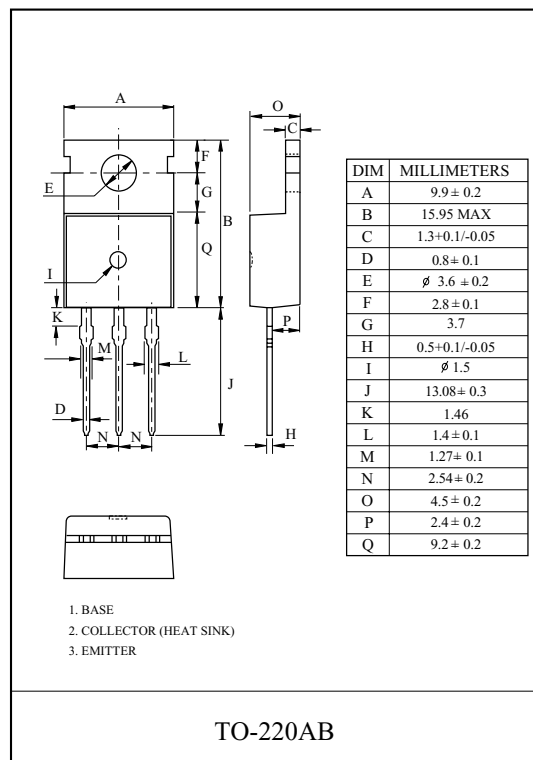
SWITCHING REGULATOR APPLICATION.
HIGH VOLTAGE SWITCHING APPLICATION.
HIGH SPEED DC-DC CONVERTER APPLICATION.
FLUORESCENT LIGHT BALLASTOR APPLICATION.

FEATURES

- Excellent Switching Times
: $t_{stg}=2.5\mu S(\text{Max.})$, $t_f=0.3\mu S(\text{Max.})$, at $I_C=2.5A$
- High Collector Voltage : $V_{CBO}=1050V$.

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

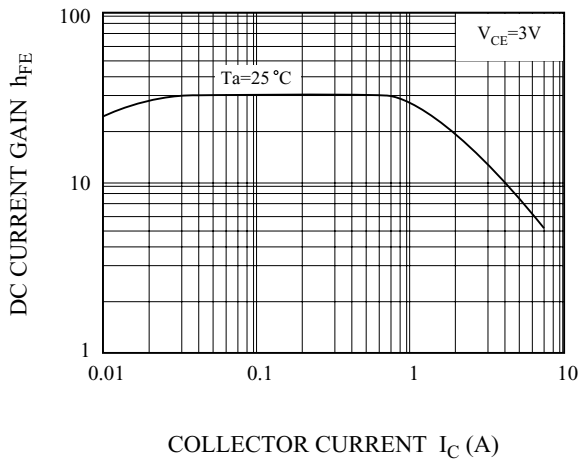
CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		V_{CBO}	1050	V
Collector-Emitter Voltage		V_{CEO}	400	V
Emitter-Base Voltage		V_{EBO}	12	V
Collector Current	DC	I_C	5	A
	Pulse	I_{CP}	10	
Base Current		I_B	2.5	A
Collector Power Dissipation ($T_c=25^\circ C$)		P_C	75	W
Junction Temperature		T_j	150	$^\circ C$
Storage Temperature Range		T_{stg}	-55~150	$^\circ C$

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

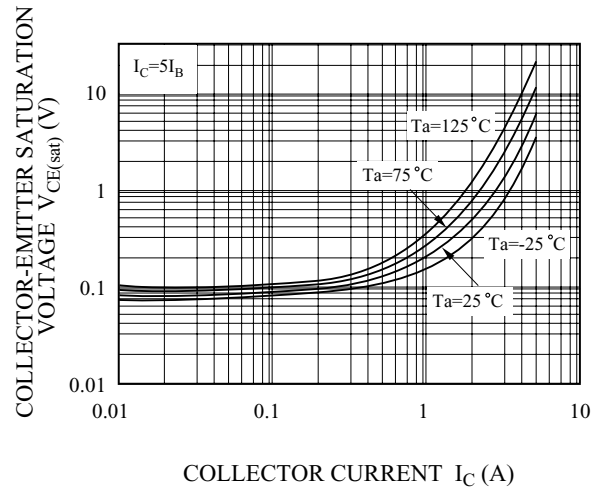
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Emitter Cut-off Current	I_{EBO}	$V_{EB}=14V$, $I_C=0$	-	-	10	μA
DC Current Gain	$h_{FE}(1)$	$V_{CE}=5V$, $I_C=10mA$	10	-	-	
	$h_{FE}(2)$	$V_{CE}=3V$, $I_C=0.8A$	20	-	40	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=1A$, $I_B=0.2A$	-	-	0.5	V
		$I_C=3.5A$, $I_B=1A$	-	-	1.5	
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=3.5A$, $I_B=1A$	-	-	1.2	V
		$I_C=2A$, $I_B=0.5A$	-	-	1.6	
Collector Output Capacitance	C_{ob}	$V_{CB}=10V$, $f=0.1MHz$, $I_E=0$	-	45	-	pF
Turn-On Time	t_{on}	$I_{B1}=+0.5A$, $I_{B2}=-1.0A$ DUTY CYCLE $\leq 2\%$	-	-	2.0	μS
Storage Time	t_{stg}		-	-	2.5	μS
Fall Time	t_f		-	-	0.3	μS

Note : h_{FE} Classification R:20~30, O:25~35, Y: 30~40

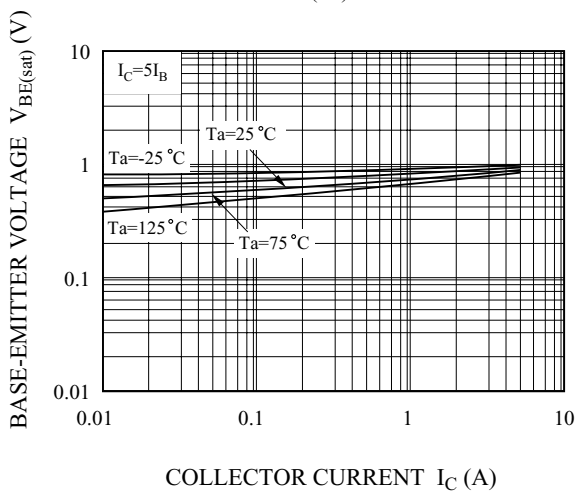
$h_{FE} - I_C$



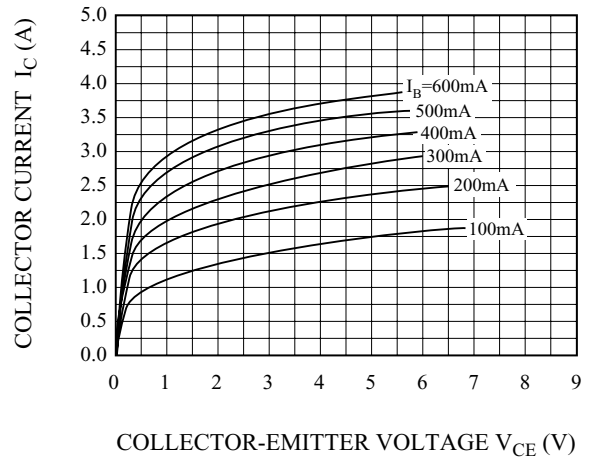
$V_{CE(sat)} - I_C$



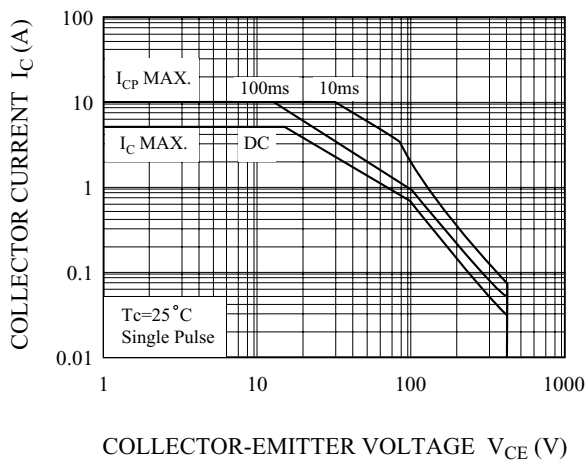
$V_{BE(sat)} - I_C$



$I_C - V_{CE}$



SAFE OPERATING AREA



$P_C - T_a$

