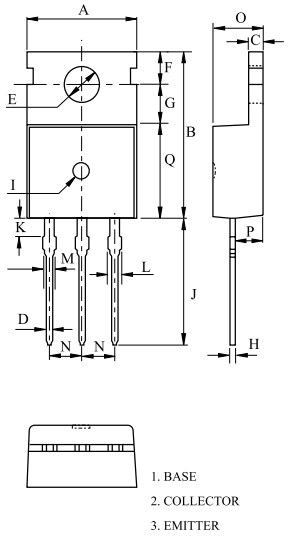
SWITCHING REGULATOR APPLICATION.
HIGH VOLTAGE SWITCHING APPLICATION.
HIGH SPEED DC-DC CONVERTER APPLICATION.
FLUORESCENT LIGHT BALLASTOR APPLICATION.

FEATURES

· Excellent Switching Times
: t_{on}=0.8 μS(Max.), t_f=0.9 μS(Max.), at I_C=2A
· High Collector Voltage : V_{CBO}=700V.



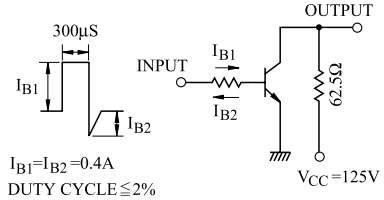
DIM	MILLIMETERS
A	9.9± 0.2
B	15.95 MAX
C	1.3+0.1/-0.05
D	0.8± 0.1
E	ø 3.6 ±0.2
F	2.8± 0.1
G	3.7
H	0.5+0.1/-0.05
I	ø 1.5
J	13.08± 0.3
K	1.46
L	1.4± 0.1
M	1.27± 0.1
N	2.54± 0.2
O	4.5± 0.2
P	2.4± 0.2
Q	9.2± 0.2

TO-220AB

MAXIMUM RATING (Ta=25℃)

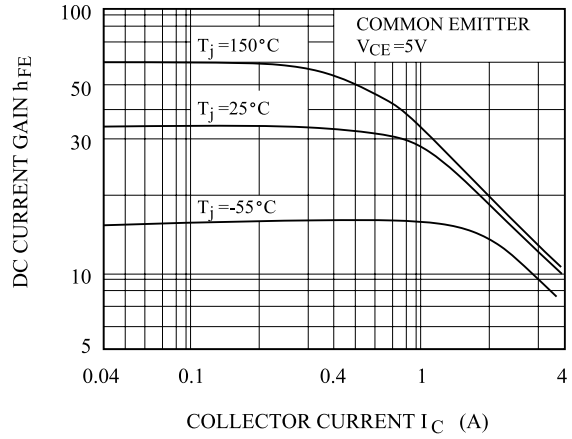
CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		V_{CBO}	700	V
Collector-Emitter Voltage		V_{CEO}	400	V
Emitter-Base Voltage		V_{EBO}	9	V
Collector Current	DC	I_C	4	A
	Pulse	I_{CP}	8	
Base Current		I_B	2	A
Collector Power Dissipation (Tc=25℃)		P_C	75	W
Junction Temperature		T_j	150	℃
Storage Temperature Range		T_{stg}	-55 150	℃

ELECTRICAL CHARACTERISTICS (Ta=25℃)

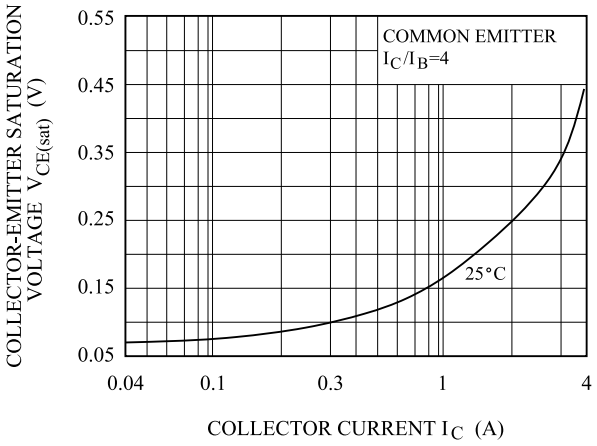
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Emitter Cut-off Current	I_{EBO}	V_{EB}=9V, I_C=0	-	-	1	mA
DC Current Gain	h_{FE}(1) (Note)	V_{CE}=5V, I_C=1A	18	-	35	
	h_{FE}(2)	V_{CE}=5V, I_C=2A	10	-	-	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=1A, I_B=0.2A	-	-	0.5	V
		I_C=2A, I_B=0.5A	-	-	0.6	
		I_C=4A, I_B=1A	-	-	1	
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	I_C=1A, I_B=0.2A	-	-	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	-	65	-	pF
Transition Frequency	f_T	V_{CE}=10V, I_C=0.5A	4	-	-	MHz
Turn-On Time	t_{on}		-	-	0.8	μS
Storage Time	t_{stg}		-	-	4	μS
Fall Time	t_f		-	-	0.9	μS

Note : h_{FE} Classification R:18 27, O:23 35

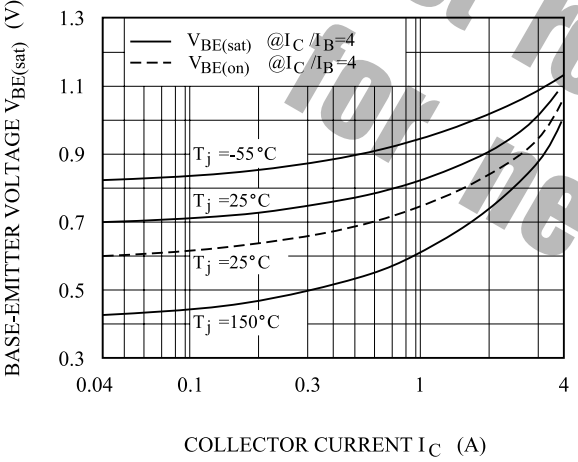
h_{FE} - I_C



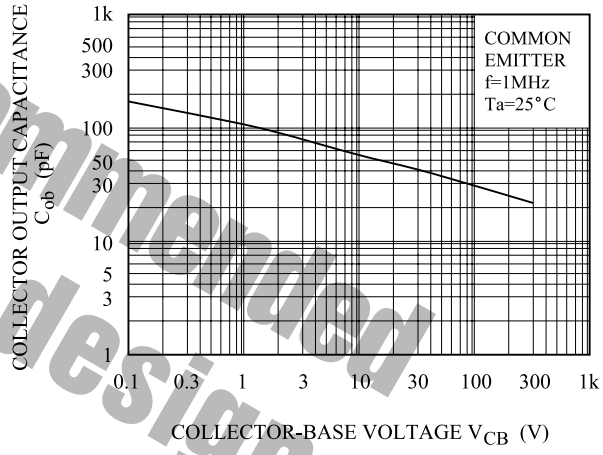
$V_{CE(sat)}$ - I_C



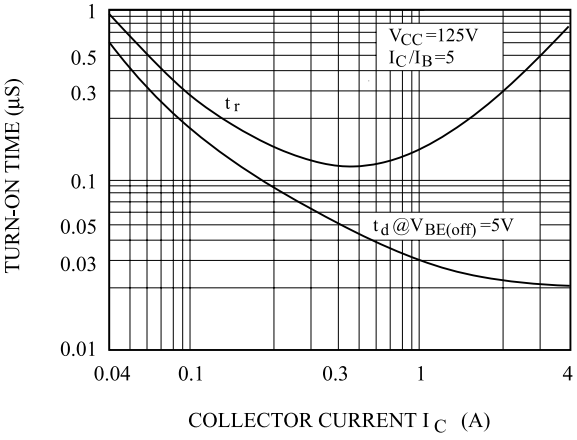
$V_{BE(sat)}$ - I_C



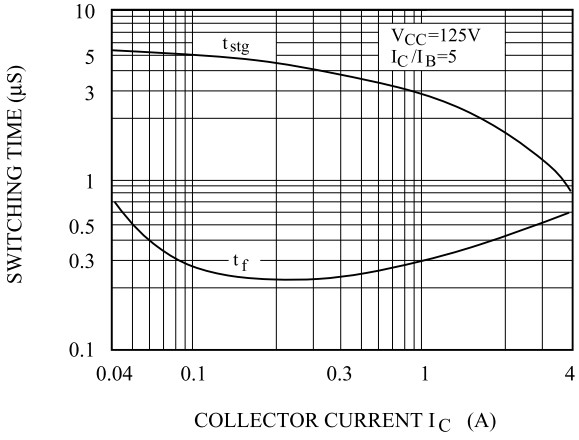
C_{ob} - V_{CB}



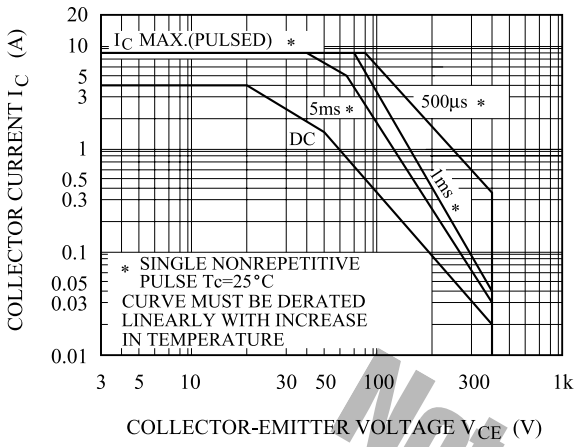
SWITCHING CHARACTERISTIC



SWITCHING CHARACTERISTIC



SAFE OPERATING AREA



P_C - Ta