

PULSE MOTOR DRIVE, HAMMER DRIVE APPLICATIONS.
SWITCHING APPLICATIONS.
POWER AMPLIFIER APPLICATIONS.

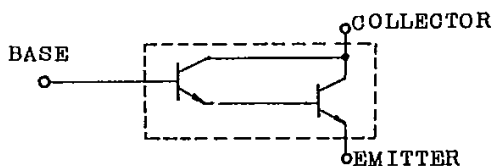
FEATURES:

- High DC Current Gain
: $h_{FE}=4000(\text{Min.})$ ($V_{CE}=2V, I_C=150\text{mA}$)
- Low Saturation Voltage
: $V_{CE}(\text{sat})=1.5V(\text{Max.})$ ($I_C=1A, I_B=1\text{mA}$)

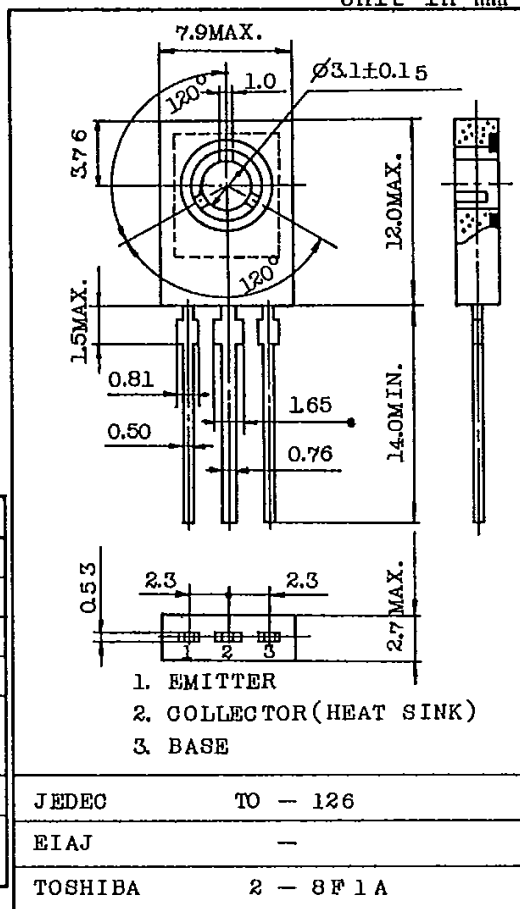
MAXIMUM RATINGS ($T_a=25^\circ\text{C}$)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	30	V
Collector-Emitter Voltage	V_{CEO}	30	V
Emitter-Base Voltage	V_{EBO}	10	V
Continuous Collector Current	I_C	1.5	A
Collector Power Dissipation ($T_a=25^\circ\text{C}$)	P_C	1.0	W
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55~150	$^\circ\text{C}$

EQUIVALENT CIRCUIT



Unit in mm



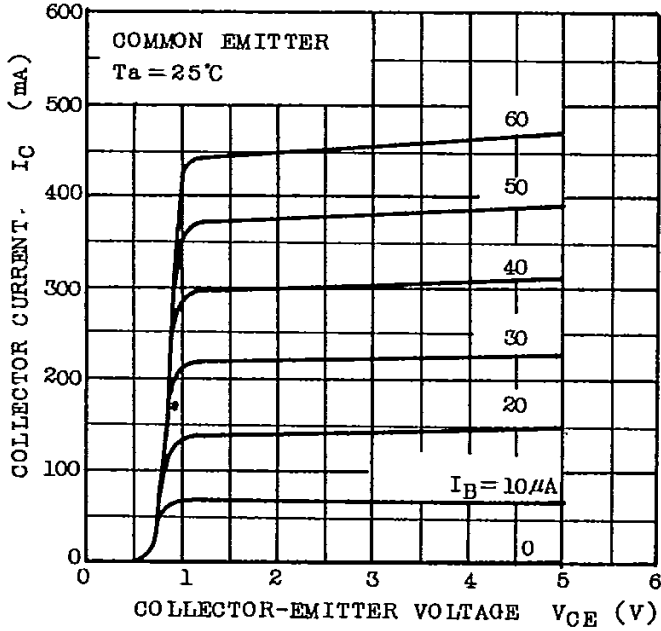
Mounting Kit No. AC46C
Weight : 0.72g

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

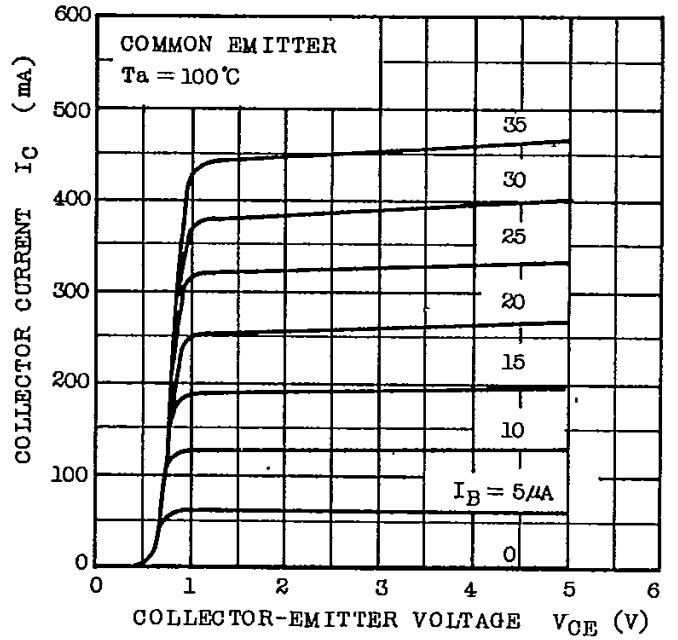
CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current		I_{CBO}	$V_{CB}=30V, I_E=0$	-	-	10	μA
Emitter Cut-off Current		I_{EBO}	$V_{EB}=10V, I_C=0$	-	-	10	μA
Collector-Emitter Breakdown Voltage		$V_{(BR)CEO}$	$I_C=10\text{mA}, I_B=0$	30	-	-	V
DC Current Gain		h_{FE}	$V_{CE}=2V, I_C=150\text{mA}$	4000	-	-	
Collector-Emitter Saturation Voltage		$V_{CE}(\text{sat})$	$I_C=1A, I_B=1\text{mA}$	-	-	1.5	V
Base-Emitter Saturation Voltage		$V_{BE}(\text{sat})$	$I_C=1A, I_B=1\text{mA}$	-	-	2.2	V
Switching Time	Turn-on Time	t_{on}		-	0.18	-	μs
	Storage Time	t_{stg}		-	0.6	-	
	Fall Time	t_f		-	0.3	-	

$I_{B1} = -I_{B2} = 1\text{mA}$
DUTY CYCLE $\leq 1\%$
 $V_{CC} = 15V$

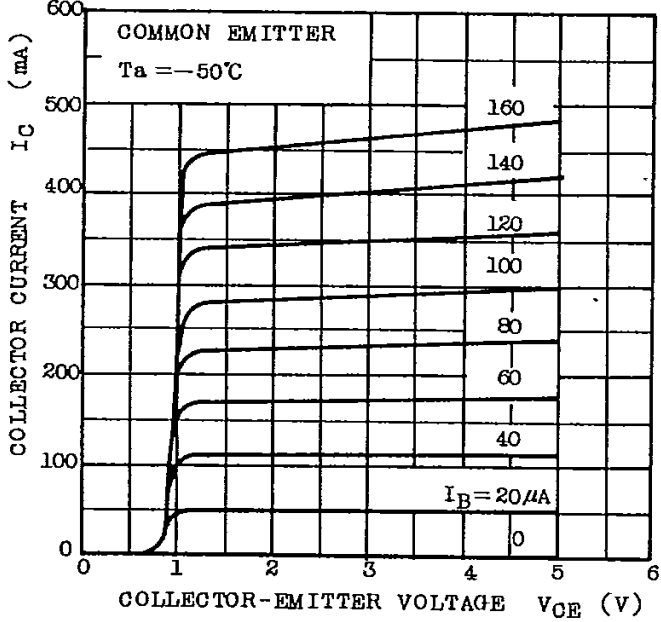
$I_C - V_{CE}$



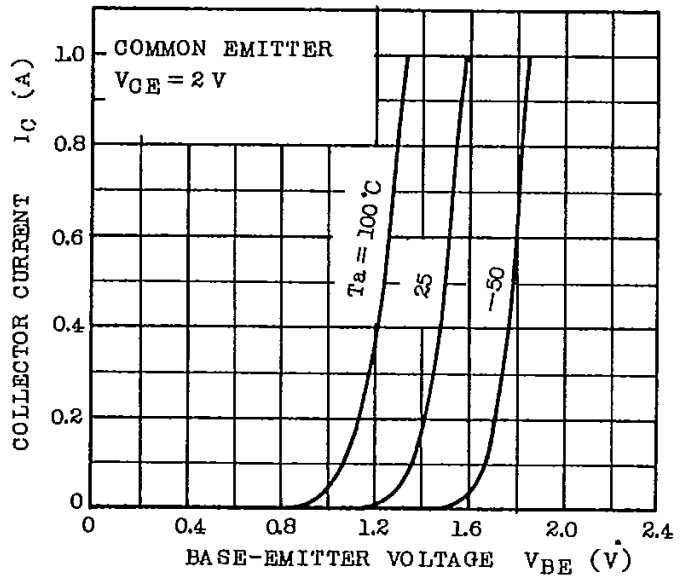
$I_C - V_{CE}$



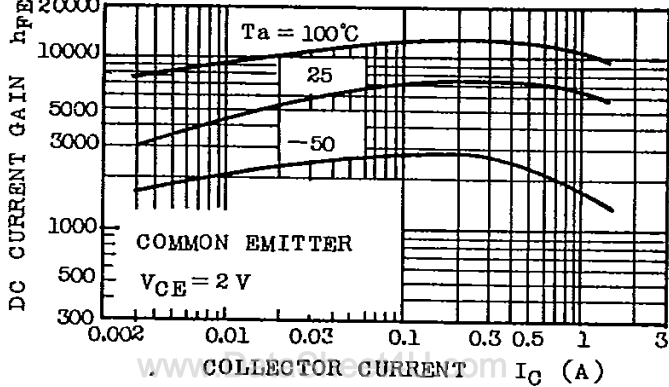
$I_C - V_{CE}$



$I_C - V_{BE}$



$h_{FE} - I_C$



$V_{CE(sat)} - I_C$

