

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

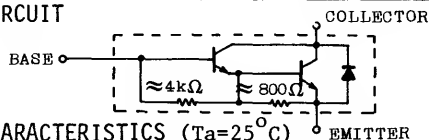
FEATURES:

- High DC Current Gain
: $h_{FE}=2000(\text{Min.})$ ($V_{CE}=2V$, $I_C=1A$)
- Low Saturation Voltage
: $V_{CE}(\text{sat})=1.5V(\text{Max.})$ ($I_C=1A$, $I_B=1mA$)

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

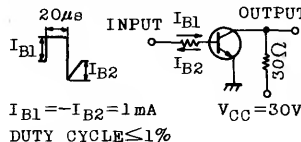
CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	80	V
Collector-Emitter Voltage	V_{CEO}	80	V
Emitter-Base Voltage	V_{EBO}	8	V
Collector Current	I_C	2	A
Base Current	I_B	0.5	A
Collector Power Dissipation ($T_c=25^\circ\text{C}$)	P_C	15	W
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55 ~ 150	$^\circ\text{C}$

EQUIVALENT CIRCUIT



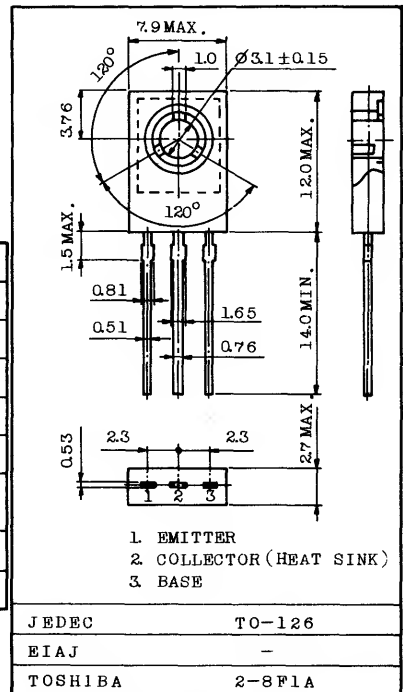
ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB}=80V$, $I_E=0$	-	-	10	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=8V$, $I_C=0$	-	-	4	mA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=10mA$, $I_B=0$	80	-	-	V
DC Current Gain	h_{FE}	$V_{CE}=2V$, $I_C=1A$	2000	-	-	
Collector-Emitter Saturation Voltage	$V_{CE}(\text{sat})$	$I_C=1A$, $I_B=1mA$	-	-	1.5	V
Base-Emitter Saturation Voltage	$V_{BE}(\text{sat})$	$I_C=1A$, $I_B=1mA$	-	-	2.0	V
Transition Frequency	f_T	$V_{CE}=2V$, $I_C=0.5A$	-	100	-	MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=10V$, $I_E=0$, $f=1\text{MHz}$	-	20	-	pF
Switching Time	Turn-on Time	t_{on}	-	0.4	-	μs
	Storage Time	t_{stg}	-	4.0	-	
	Fall Time	t_f	-	0.6	-	



INDUSTRIAL APPLICATIONS

Unit in mm



JEDEC TO-126

EIAJ

TOSHIBA 2-8F1A

Mounting Kit No. AC46C

Weight : 0.72g

