

SWITCHING REGULATOR AND HIGH VOLTAGE
SWITCHING APPLICATIONS.
HIGH SPEED DC-DC CONVERTER APPLICATION.

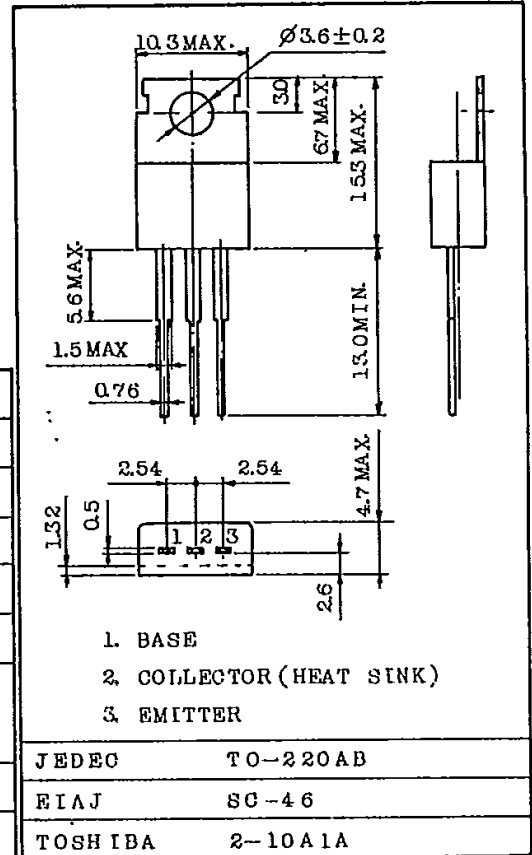
FEATURES:

- Excellent Switching Times
: $t_r=1.0\mu s$ (Max.), $t_f=1.0\mu s$ (Max.) at $I_C=4A$
- High Collector Breakdown Voltage : $V_{CEO}=400V$

MAXIMUM RATINGS (Ta=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	500	V
Collector-Emitter Voltage	V_{CEO}	400	V
Emitter-Base Voltage	V_{EBO}	7	V
Collector Current	I_C	5	A
Base Current	I_B	1	A
Collector Power Dissipation	P_C	Ta=25°C	1.5
		Tc=25°C	40
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	-55 ~ 150	°C

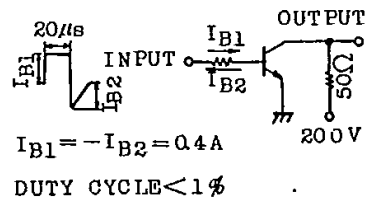
INDUSTRIAL APPLICATIONS
Unit in mm



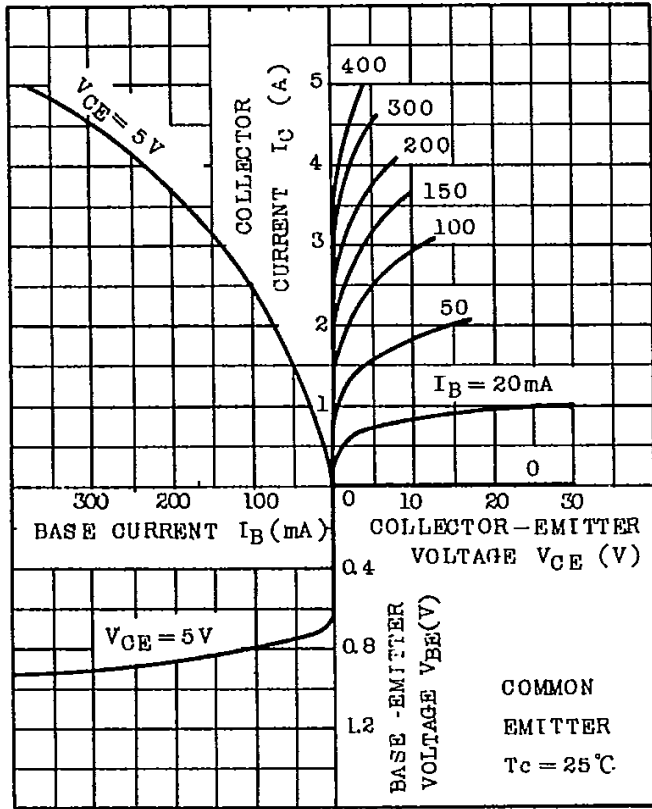
Mounting kit No. AC75
Weight : 1.9g

ELECTRICAL CHARACTERISTICS (Ta=25°C)

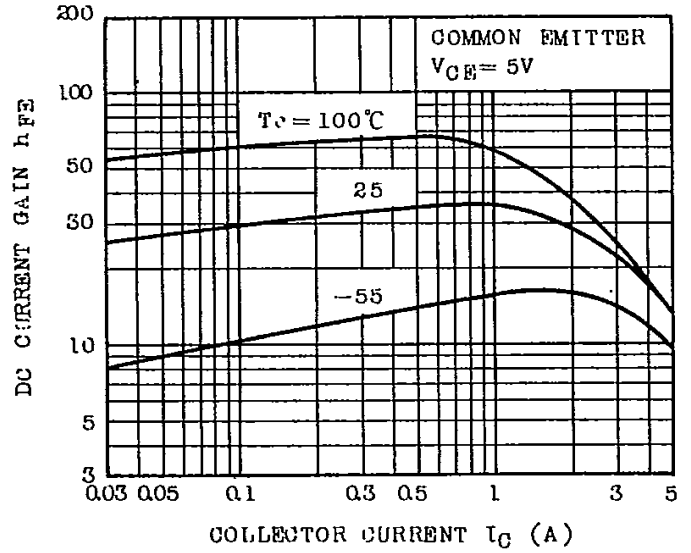
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB}=400V, I_E=0$	-	-	100	A
Emitter Cut-off Current	I_{EBO}	$V_{EB}=7V, I_C=0$	-	-	1	mA
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=1mA, I_E=0$	500	-	-	V
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=10mA, I_B=0$	400	-	-	V
DC Current Gain	h_{FE}	$V_{CE}=5V, I_C=3A$	12	-	-	
		$V_{CE}=5V, I_C=5A$	8	-	-	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=5A, I_B=1A$	-	-	1.0	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=5A, I_B=1A$	-	-	1.5	V
Switching Time	Rise Time	t_r	-	-	1.0	μs
	Storage Time	t_{stg}	-	-	2.5	
	Fall Time	t_f	-	-	1.0	



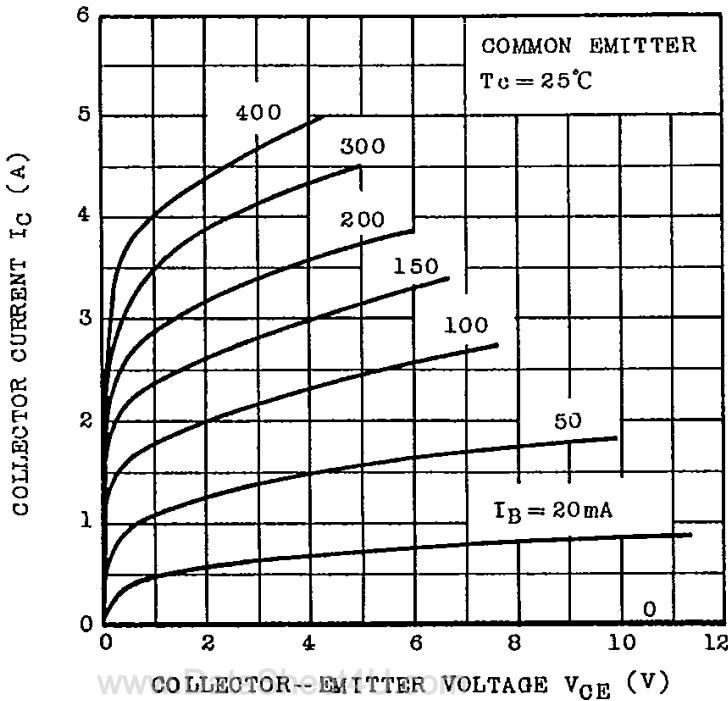
STATIC CHARACTERISTICS



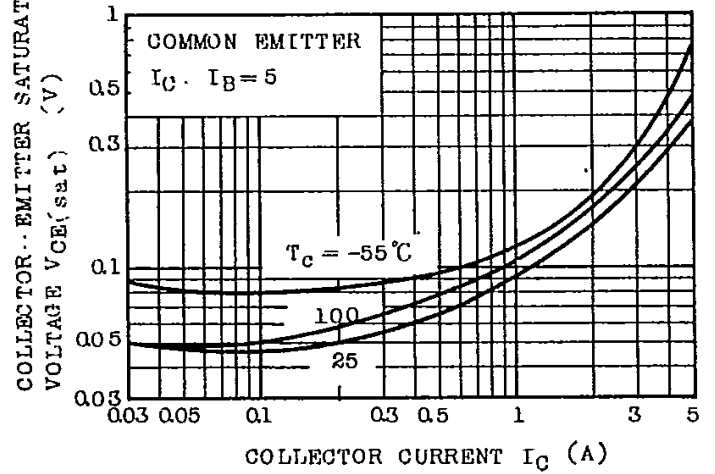
$h_{FE} - I_C$



$I_C - V_{CE}$ (LOW VOLTAGE REGION)



$V_{CE(sat)} - I_C$



$V_{BE(sat)} - I_C$

