

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

**FEATURES:**

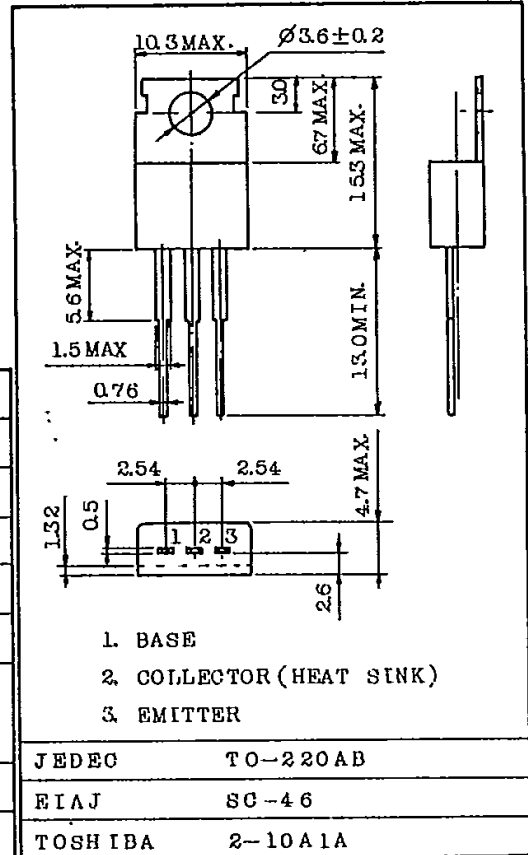
- Excellent Switching Times  
:  $t_r=1.0\mu s$  (Max.),  $t_f=1.0\mu s$  (Max.) at  $I_C=4A$
- High Collector Breakdown Voltage :  $V_{CE0}=400V$

**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

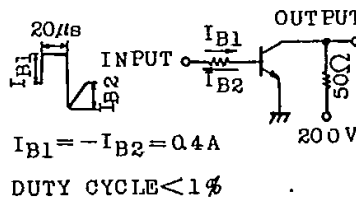


Mounting kit No. AC75

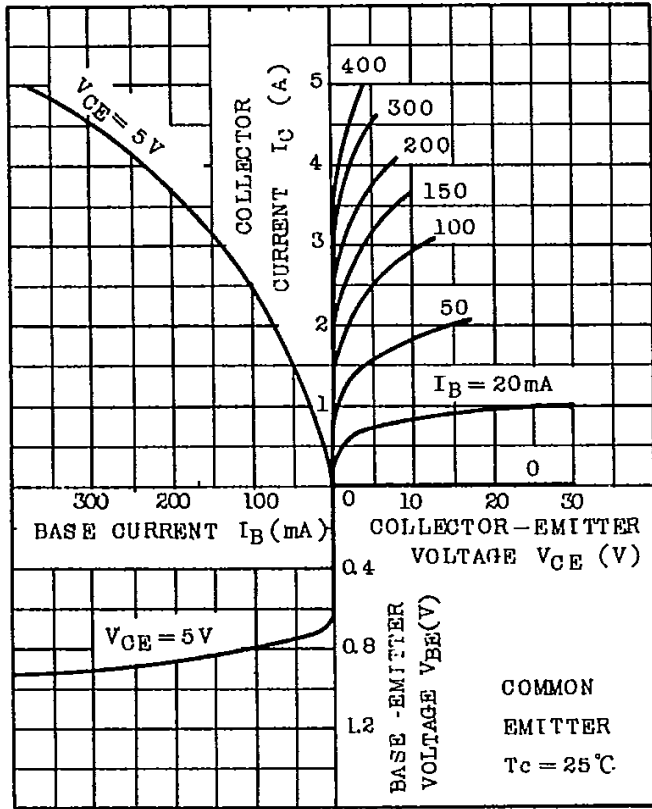
Weight : 1.9g

**ELECTRICAL CHARACTERISTICS (Ta=25°C)**

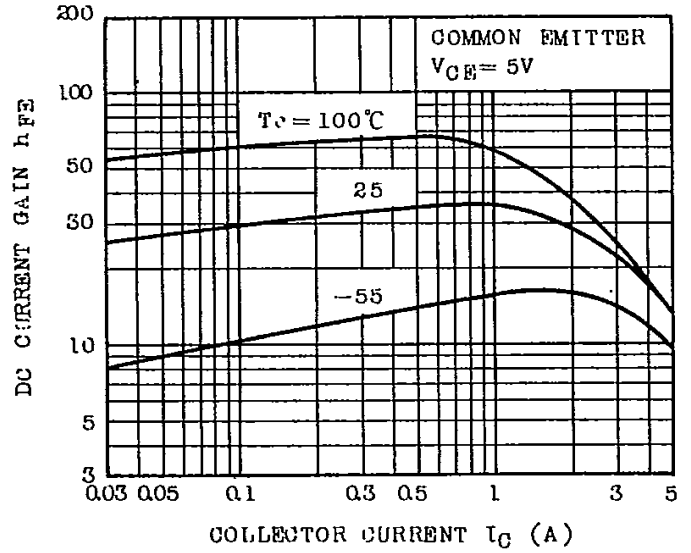
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	$I_{CBO}$	$V_{CB}=400V, I_E=0$	-	-	100	A
Emitter Cut-off Current	$I_{EBO}$	$V_{EB}=7V, I_C=0$	-	-	1	mA
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=1mA, I_E=0$	500	-	-	V
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=10mA, I_B=0$	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	$\mu s$
	Storage Time	$t_{stg}$	-	-	2.5	
	Fall Time	$t_f$	-	-	1.0	



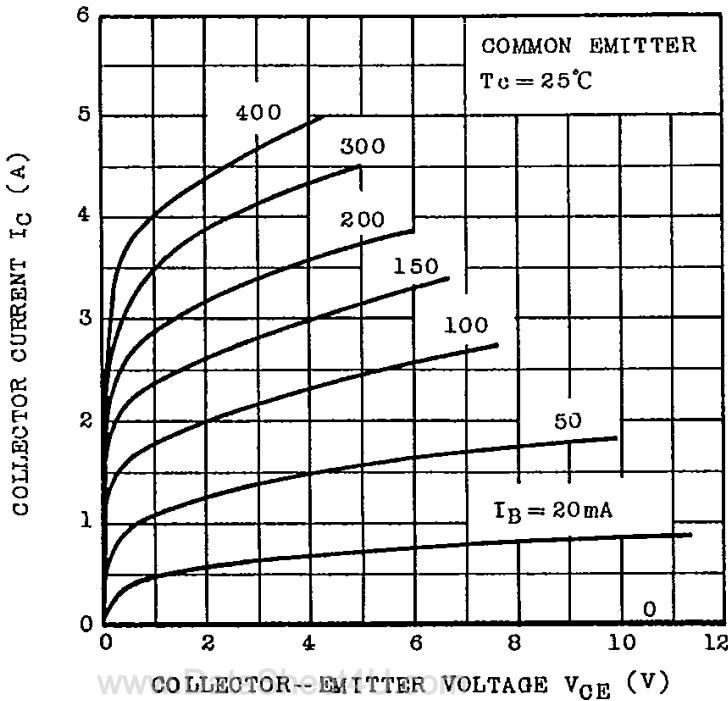
STATIC CHARACTERISTICS



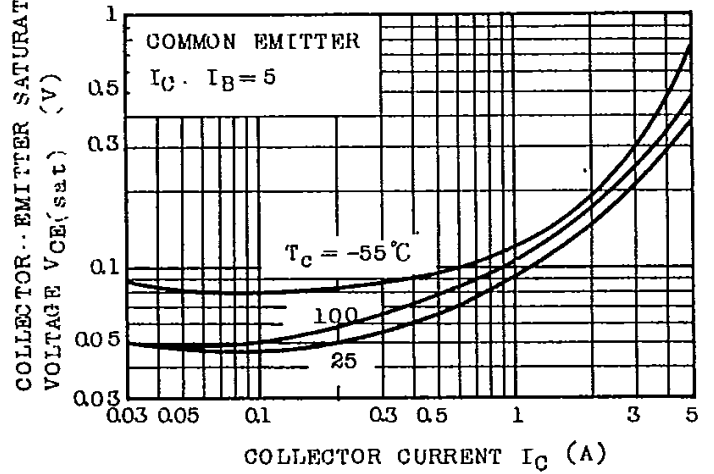
$h_{FE} - I_C$



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



$V_{CE(sat)} - I_C$



$V_{BE(sat)} - I_C$

