

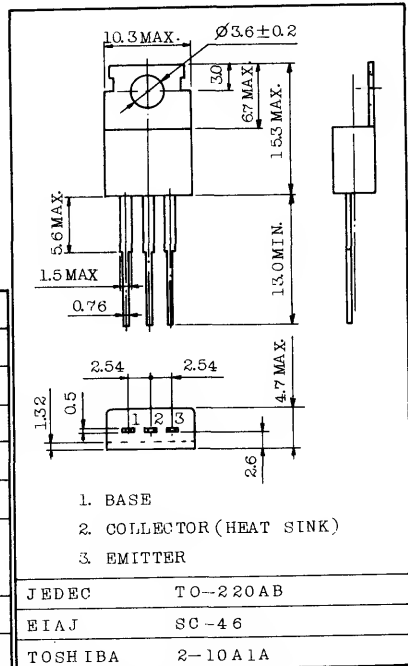
2SC2553

SILICON NPN TRIPLE DIFFUSED TYPE

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

INDUSTRIAL APPLICATIONS

Unit in mm



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 ($T_a=25^\circ C$)

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	$T_a=25^\circ C$	1.5	W
		$T_c=25^\circ C$	40	
Junction Temperature	T_j	150	$^\circ C$	
Storage Temperature Range	T_{stg}	-55 ~ 150	$^\circ C$	

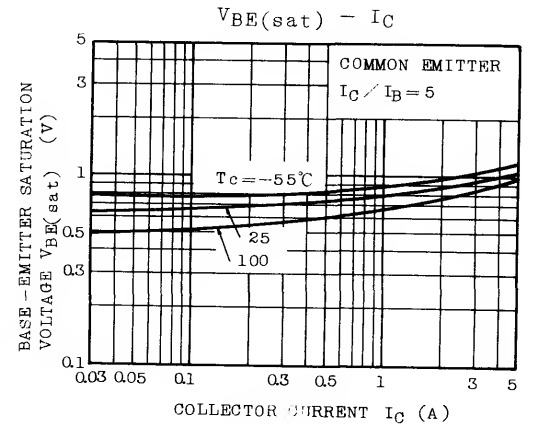
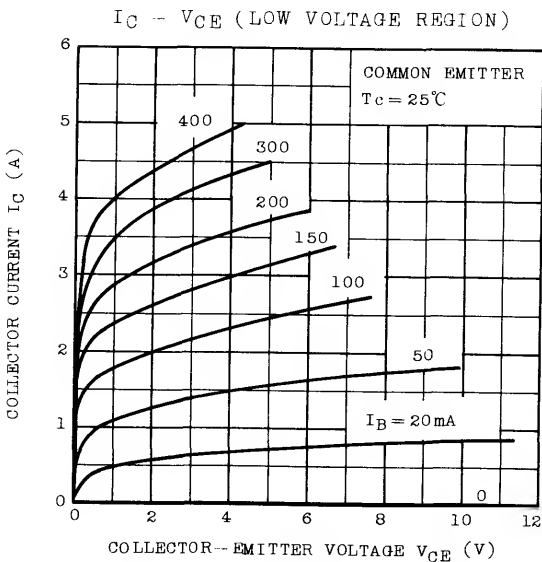
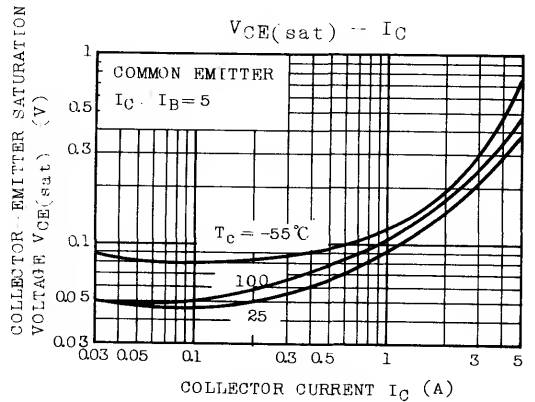
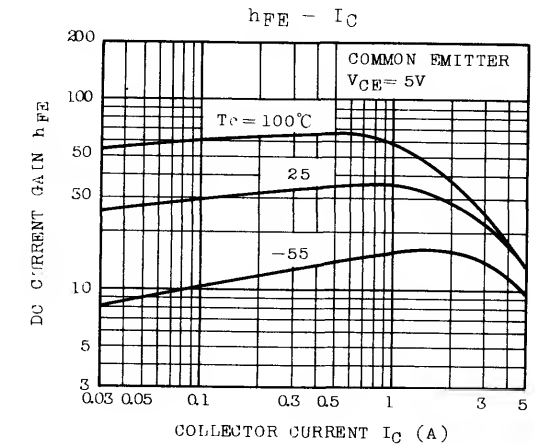
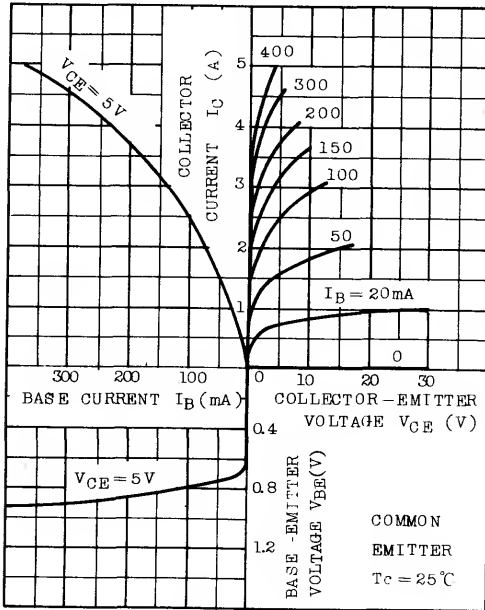
Mounting kit No. AC75

Weight : 1.9g

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

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}	$I_{B1} = -I_{B2} = 0.4A$ $DUTY\ CYCLE < 1\%$		-	2.5	
	Fall Time	t_f			-	1.0	

STATIC CHARACTERISTICS



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