

SILICON NPN TRIPLE DIFFUSED TYPE

2SC2200

SWITCHING REGULATOR AND HIGH VOLTAGE
 SWITCHING APPLICATIONS.
 HIGH SPEED DC-DC CONVERTER APPLICATIONS.
 FEATURES:

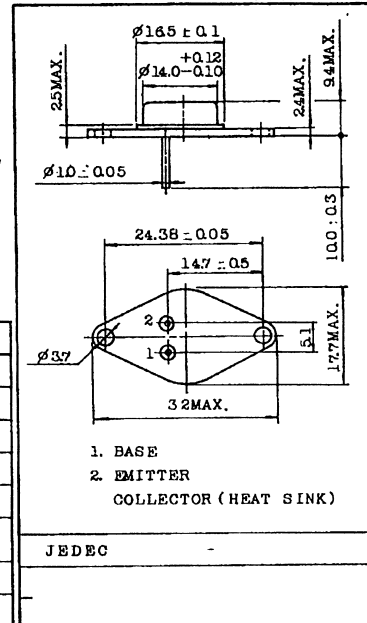
- Excellent Switching Time ($I_C=3A$)
 : $t_r=1.0\mu s$ Max. $t_f=1.0\mu s$ Max.
- High Collector Breakdown Voltage : $V_{CEO}=400V$

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	7	A
Base Current	I_B	3	A
Collector Power Dissipation ($T_c=25^\circ C$)	P_C	40	W
Junction Temperature	T_j	150	$^\circ C$
Storage Temperature Range	T_{stg}	-65~150	$^\circ C$

INDUSTRIAL APPLICATIONS

Unit in mm



Mounting Kit No. AC74
 Weight : 7.6g

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	μA
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
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=1mA, I_C=0$	7	-	-	V
DC Current Gain	hFE	$V_{CE}=5V, I_C=3A$	10	-	-	-
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=3A, I_B=0.3A$	-	-	1.5	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=3A, I_B=0.3A$	-	-	2.0	V
Switching Time	Rise Time	t_r	-	-	1.0	μs
	Storage Time	t_{stg}	-	-	2.0	
	Fall Time	t_f	-	-	1.0	

Switching Time Test Circuit:
 $V_{CC}=200V$, $I_{B1}=I_{B2}=0.3A$, $I_C=3A$, $DUTY\ CYCLE \leq 1\%$.
 Waveform shows $20\mu s$ rise time. Input and output waveforms are shown.

