

SILICON NPN TRIPLE DIFFUSED TYPE

# 2SC2200

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

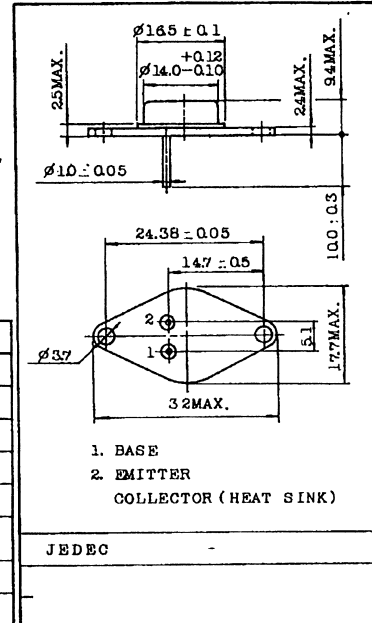
- Excellent Switching Time ( $I_C=3A$ )  
:  $t_r=1.0\mu s$  Max.  $t_f=1.0\mu s$  Max.
- High Collector Breakdown Voltage :  $V_{CEO}=400V$

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

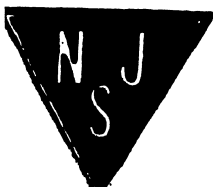


Mounting Kit No. AC74  
Weight : 7.6g

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	$\mu A$
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
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=1mA, I_C=0$	7	-	-	V
DC Current Gain	$h_{FE}$	$V_{CE}=5V, I_C=3A$	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	$\mu s$
	Storage Time	$t_{stg}$	-	-	2.0	
	Fall Time	$t_f$	-	-	1.0	

Test circuit diagram:  
 -  $V_{CC}=200V$   
 - Input pulse: 20 $\mu s$   
 -  $I_{B1} = -I_{B2} = 0.3A$   
 - DUTY CYCLE  $\leq 1\%$   
 - Output:  $I_C$  through a load resistor (68 $\Omega$ )



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