New Jersey Semi-Conductor Products, Inc.

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SILICON NPN TRIPLE DIFFUSED TYPE

2SC2200

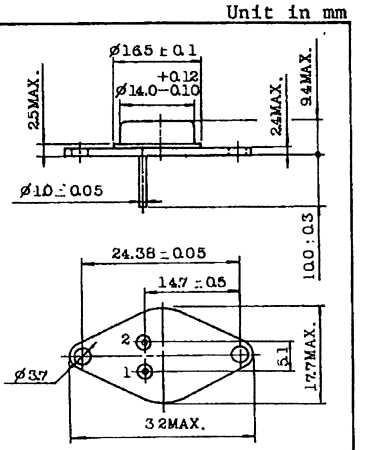
INDUSTRIAL APPLICATIONS

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

FEATURES:

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

Unit in mm



1. BASE
2. EMITTER
COLLECTOR (HEAT SINK)

JEDEC -

Mounting Kit No. AC74
Weight : 7.6g

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	7	A
Base Current	I_B	3	A
Collector Power Dissipation (Tc=25°C)	P_C	40	W
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	−65∼150	°C

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	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		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	20μs, I_{B1}, I_{B2}, V_{CC}=200V, I_C, 68Ω, INPUT, OUTPUT, I_{B1}=−I_{B2}=0.3A, DUTY CYCLE≦1%	-	-	1.0	μs
	Storage Time	t_{stg}		-	-	2.0	
	Fall Time	t_f		-	-	1.0	

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