

New Jersey Semi-Conductor Products, Inc.

20 STERN AVE.
SPRINGFIELD, NEW JERSEY 07081
U.S.A.

TELEPHONE: (973) 376-2922
(212) 227-6005
FAX: (973) 376-8960

JEDEC Type: 2N2757, 2758, 2759, 2760, 2761, 2762,
2N2763, 2764, 2765, 2766, 2767, 2768,
2N2769, 2770, 2771, 2772, 2773, 2774,
2N2775, 2776, 2777, 2778, 2779, 2780

JOINT ELECTRON DEVICE ENGINEERING COUNCIL
REGISTRATION DATA
SILICON POWER TRANSISTOR
POWER SWITCHING

I. General Description

This transistor is a NPN silicon power transistor designed primarily for high power switching applications and inverters at or below the collector current given in Table I. It is intended for Industrial and Military class of service.

II. Mechanical Data

- A. The transistor has an outline as per Figure 1
- B. Terminal location is shown in Figure 1
- C. Maximum Stud Torque 40 in. lbs. Non Lubricated.
Minimum Stud Torque 30 in. lbs. Non Lubricated.

III. Maximum Ratings

A. Temperature

1. Storage Temperature Range T_{stg} -65°C to $+175^{\circ}\text{C}$
2. Operating Case Temperature Range T_C -65°C to $+175^{\circ}\text{C}$

B. Voltage

1. V_{CEX} See Table I
2. V_{CBO} See Table I
3. V_{EBO} 15V D.C.
4. V_{CEO} See Table I (Same as $V_{CEO(sus)}$)

C. Current

1. Continuous Collector Current - 30 a.
2. Continuous Base Current 7.5 Amps.

- D. 1. Maximum Continuous Power Dissipation - 200 Watts at a T_C of 75°C Max.
2. Linear Derating Factor $2.0\text{W}/^{\circ}\text{C}$



Quality Semi-Conductors

JEDEC No.	Test Conditions for "Turn On" and "Turn Off" Time Values						Turn On $t_d + t_r$ Fig. 2 Max.	Turn Off $t_s + t_f$ Fig. 2 Max.	h _{fe}		
	I _C	T _C	V _{CC}	I _B (OFF)	I _B (ON)	I _C			V _{CE}	Freq.	Min. h _{fe}
2N2757	10A	25°C	12V	1.5A	3A	20µSec	20µSec	12V	1Kc	25	
2758	10	25	12	1.5	3	10	20	12	1	25	
2759	10	25	12	1.5	3	10	20	12	1	25	
2760	10	25	12	1.5	3	10	20	12	1	25	
2761	10	25	12	1.5	3	10	20	12	1	25	
2762	10	25	12	1.5	3	10	20	12	1	25	
2N2763	15	25	12	2.25	4.5	12	21	12	1	20	
2764	15	25	12	2.25	4.5	12	21	12	1	20	
2765	15	25	12	2.25	4.5	12	21	12	1	20	
2766	15	25	12	2.25	4.5	12	21	12	1	20	
2767	15	25	12	2.25	4.5	12	21	12	1	20	
2768	15	25	12	2.25	4.5	12	21	12	1	20	
2N2769	20	25	12	3.0	6.0	13	22	12	1	20	
2770	20	25	12	3.0	6.0	13	22	12	1	20	
2771	20	25	12	3.0	6.0	13	22	12	1	20	
2772	20	25	12	3.0	6.0	13	22	12	1	20	
2773	20	25	12	3.0	6.0	13	22	12	1	20	
2774	20	25	12	3.0	6.0	13	22	12	1	20	
2N2775	25	25	12	3.75	7.5	14	23	12	1	20	
2776	25	25	12	3.75	7.5	14	23	12	1	20	
2777	25	25	12	3.75	7.5	14	23	12	1	20	
2778	25	25	12	3.75	7.5	14	23	12	1	20	
2779	25	25	12	3.75	7.5	14	23	12	1	20	
2780	25	25	12	3.75	7.5	14	23	12	1	20	

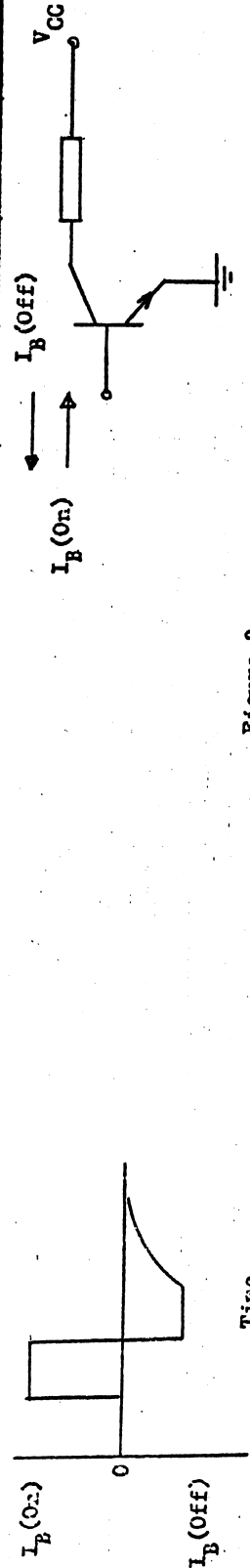
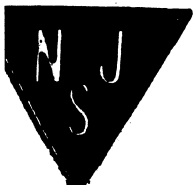


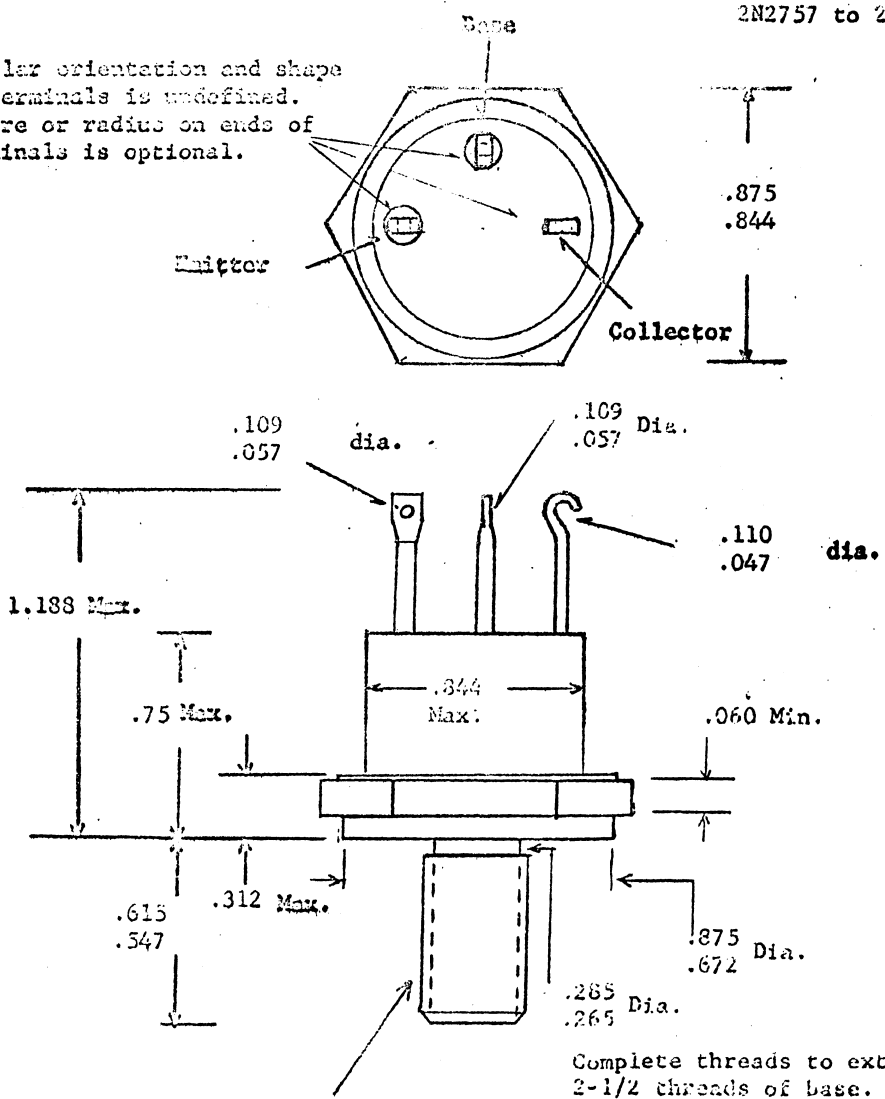
Figure 2

NJ Semi-Conductors reserves the right to change test conditions, parameter limits and package dimensions without notice. Information furnished by NJ Semi-Conductors is believed to be both accurate and reliable at the time of going to press. However, NJ Semi-Conductors assumes no responsibility for any errors or omissions discovered in its use. NJ Semi-Conductors encourages customers to verify that datasheets are current before placing orders.



JEDEC Type
2N2757 to 2N2780

Angular orientation and shape of terminals is undefined. Square or radius on ends of terminals is optional.



5/16-24 UNF-2A Plated Thread

.2854/.2806 Pitch Dia.

Ref. Screw Thread Standards for Federal Services - Handbook H28, 1957 P1