



# SANKEN ELECTRIC COMPANY, LTD.

## 4. Ratings

### 4-1. Absolute Maximum Ratings (Ta=25°C)

Description	Symbol	Unit	Rating
Peak Input Voltage	$V_{IN}$	V	500
Input Current	$I_{IN}$	A	10(Pulse 20A)
Power Dissipation *1	$P_D$	W	27(Tc=100°C)
Operating Temperature	$T_{OP}$	°C	-20~+125 (Tc)
Storage Temperature	$T_{stg}$	°C	-30~+125
Junction Temperature	$T_J$	°C	+150

### 4-2. Electrical Characteristics (Ta=25°C) (Per Fig. 1-1)

Description	Symbol	Unit	Rating			Conditions
			MIN.	TYP.	MAX.	
Set Output Voltage	$V_O$	V	41.3	41.8	42.3	$I_{IN}=7mA$ , Test Circuit #1
Temperature Coefficient of Output Voltage		mv/°C	$\pm 2$			Tc=-20~+100°C, $I_{IN}=7mA$ Test Circuit #1
Power Transistor Characteristics	Collector Saturated Voltage	$V_{CE(SAT)}$	V		0.5	$I_C = 5A$ $I_B = 1A$
	DC Current Gain	$h_{FE}$	15		40	$V_{CE}=4V$ , $I_C=1A$
	Collector Cutoff Current	$I_{CEX}$	mA		1	$V_{CE}=500V$ $V_{BE}=-1.5V$
	Base-Emitter Saturated Voltage	$V_{BE(SAT)}$	V		1.5	$I_C = 5A$ $I_B = 1A$
	Thermal Resistance	$\theta_{J-C}$	°C/W	1.8		Upper of Junction Stem
	Switching Time	$t_s$ $t_r$	$\mu s$ $\mu s$		10 0.4	Test Circuit #2 Test Circuit #2
Output Voltage *2		V	$115 \pm 2$			$V_{IN}=100V$ , $I_{O1}=1.2A$
Line Regulation 1 *2 (vs. Input Voltage)		V	Initial Value $\pm 2V$			$V_{IN}=85 \sim 132V$ $I_O = 1.2A$
Line Regulation 2 *2 (vs. Output Current)		V	Initial Value $\pm 2V$			$V_{IN}=100V$ $I_{O1}=0.4 \sim 1.2A$

\*1: Suggested Case Temperature Top (Tc) = 100 °C.

\*2: Please refer to the Application Circuit.

Date: August 22, 1990

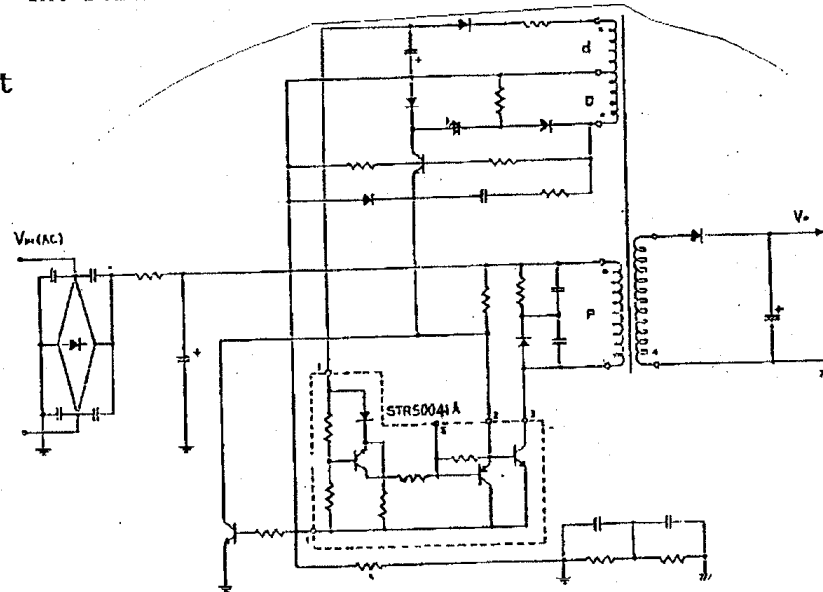
Specification No.: SSE-17760E

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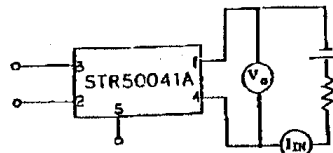
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The Output Voltage can be determined by the number of winding wires D and S of transformer. The reference value is  $V_o=115V$ .

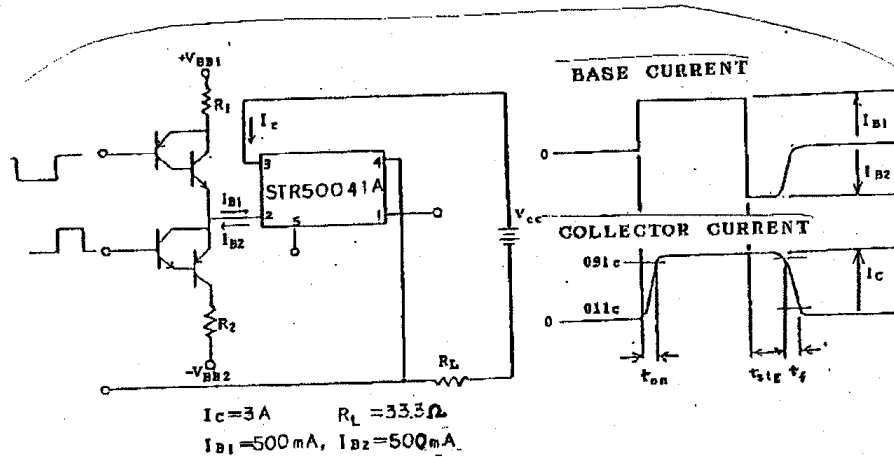
Application Circuit



Test Circuit #1



Test Circuit #2

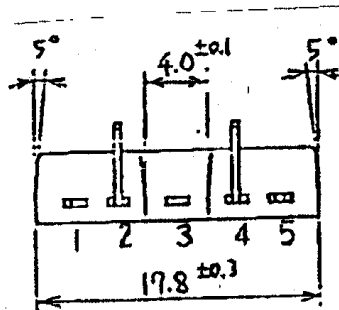
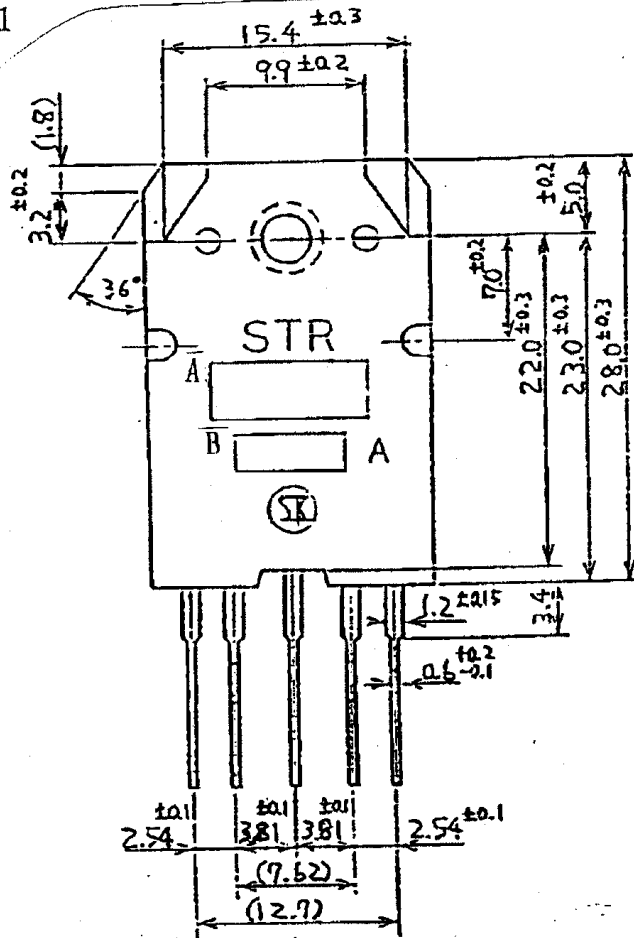


## 4-4. Suggested Silicone Grease

G-746: SHIN-ETSU CHEMICALS  
 YG6280: TOSHIBA SILICONE  
 SC102: TORAY SILICONE

5. Marking and Dimension

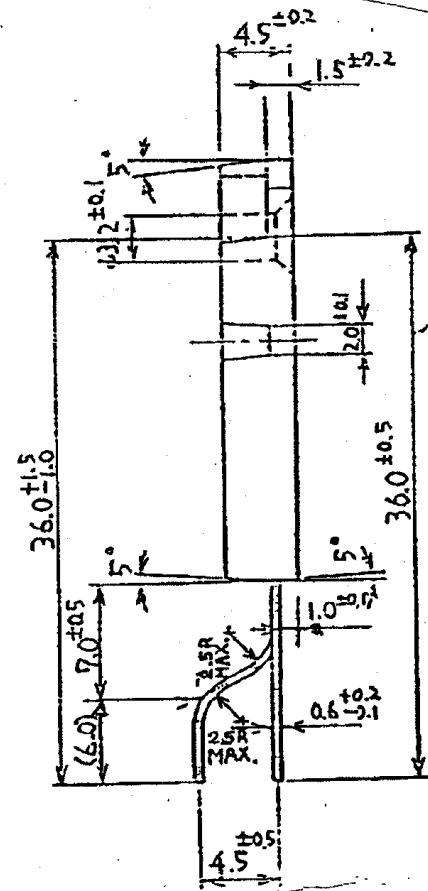
Fig. 1



Pin Connection

- ① - V<sub>OUT</sub> SENSE
- ② - Base Drive (B)
- ③ - Input (C)
- ④ - Earth (E)
- ⑤ - Soft Start

Unit: mm



A. Part Number: STR50041A

B. Lot Number:

1st digit - Last digit of Year  
2nd digit - Month

Jan. ~ Sept.: 1 ~ 9  
Oct.: 0  
Nov.: N  
Dec.: D

3rd & 4th digit - Day (01 ~ 31)

Date: August 22, 1990

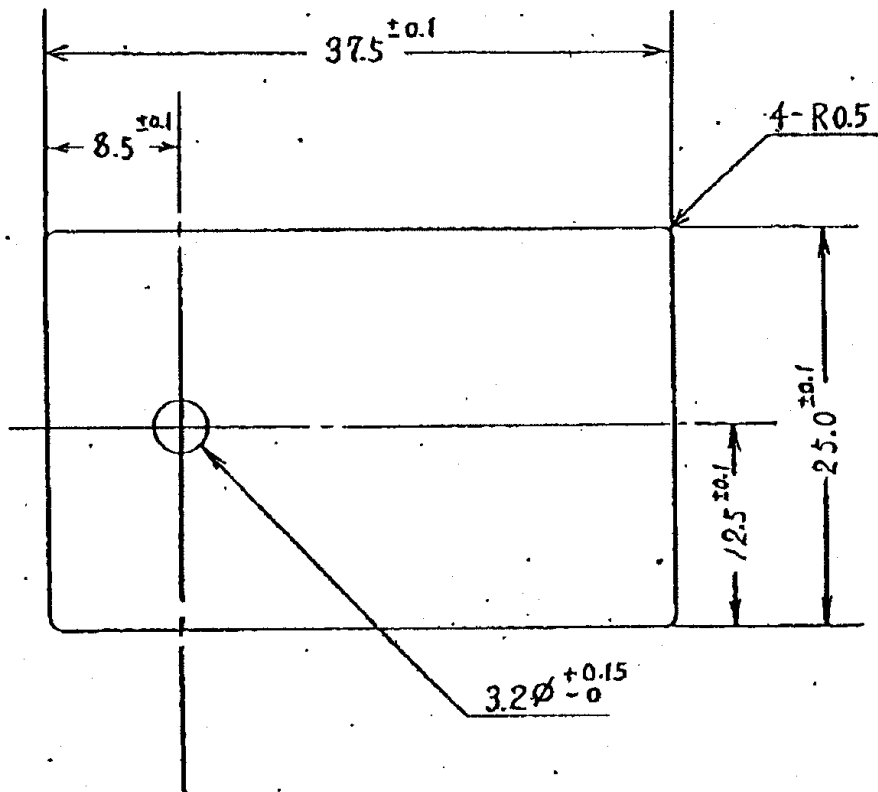
Specification No.:

SSE-17760E

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SANKEN ELECTRIC COMPANY, LTD.

MICA No.23 for STR Series



Material : MICA

t : 0.08~0.15

Unit : mm