



# SANKEN ELECTRIC COMPANY, LTD.

## S P E C I F I C A T I O N S

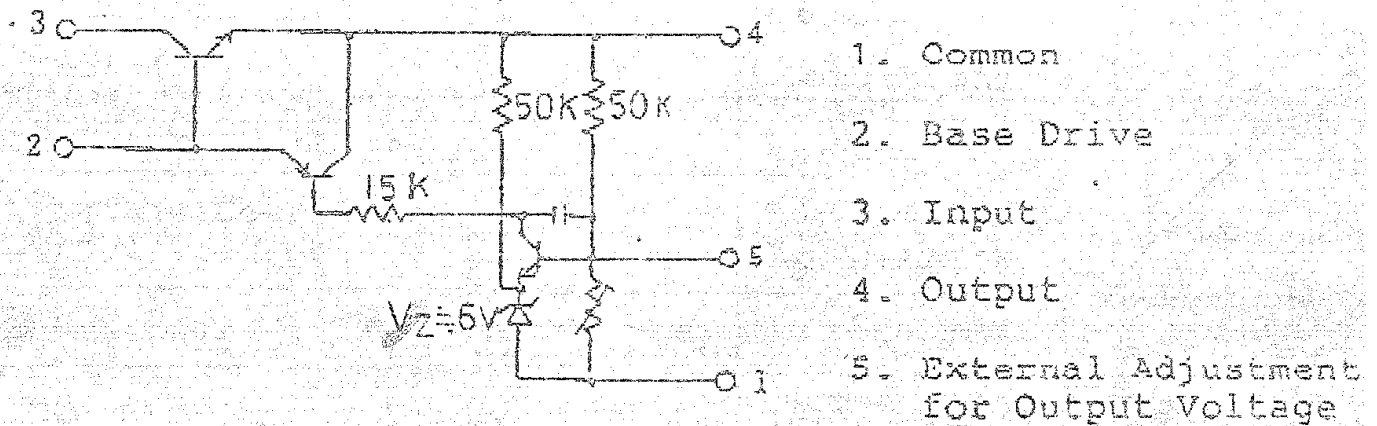
Sanken Hybrid IC Voltage Regulator STR50330

Date : November 30, 1987  
Specification : SSE-

### Structure and Application

- a. Hybrid IC Voltage Regulator with built in Power Transistor NPN Triple Diffused Planar
- b. On Line SMPS for Color TV
- c. Output voltage fixed

### Equivalent Circuit



Outline Drawings, Dimensions and Pin Assignment as per attached drawing Fig.1

The type number and lot number shall be legitimately marked by white color.

### \*Suggested Silicone Grease

- C746: SHIN-ETSU CHEMICAL INDUSTRY CO., LTD.
- C747: SHIN-ETSU CHEMICAL INDUSTRY CO., LTD.
- YG6260: TOSHIBA SILICONE CO., LTD.
- SC102: TORAY SILICONE CO., LTD.

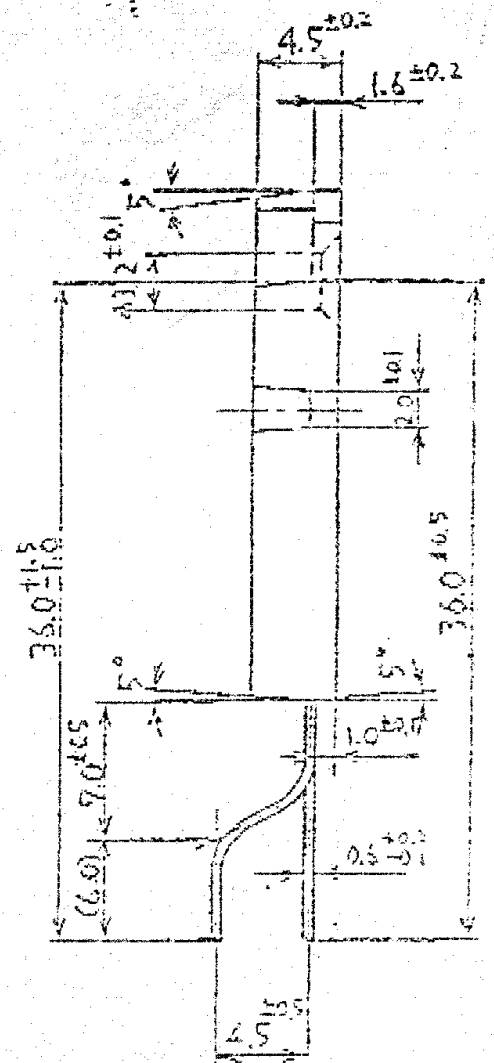
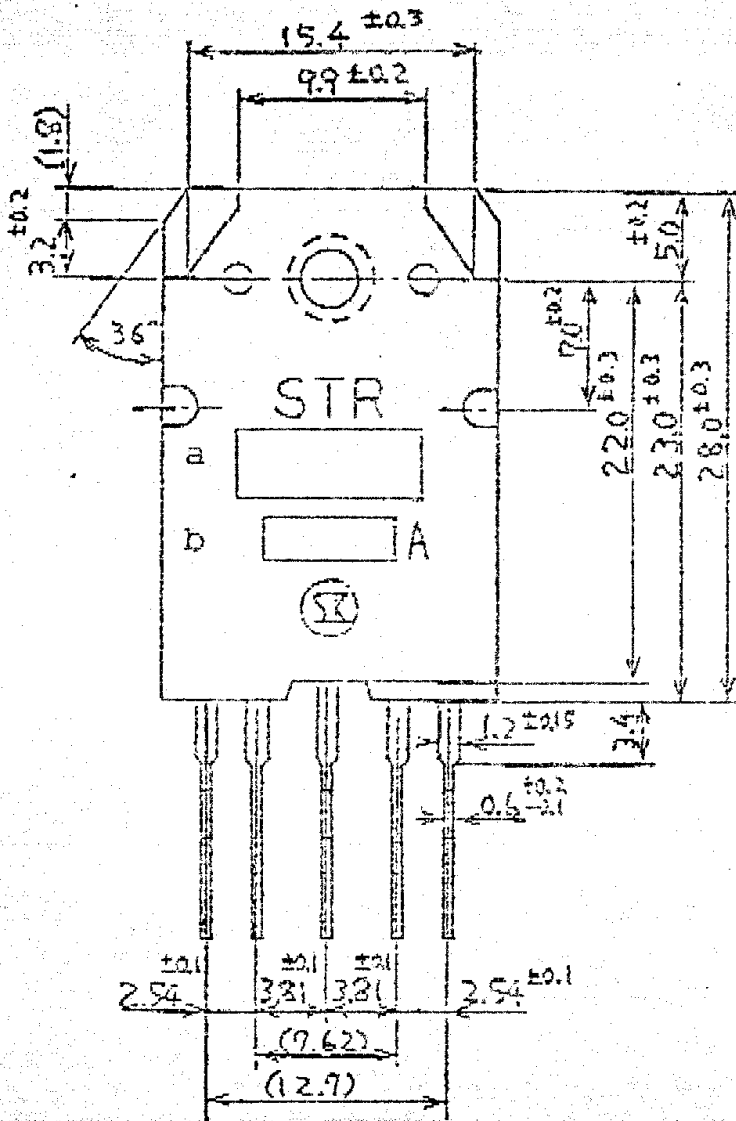
**5. Maximum Ratings**

Description	Symbol	Unit	Ratings
Maximum Peak Input Voltage	$V_{IN}$	V	500
Input Current	$I_{IN}$	A	6
Maximum Power Dissipation	$P_D$	W	27 ( $T_C=100^{\circ}C$ )
Operational Temperature	$T_{op}$	$^{\circ}C$	-20 ~ +125 ( $T_C$ )
Storage Temperature	$T_{stg}$	$^{\circ}C$	-30 ~ +125
Power Tr Junction Temperature	$T_j$	$^{\circ}C$	+150

**6. Electrical Characteristics**

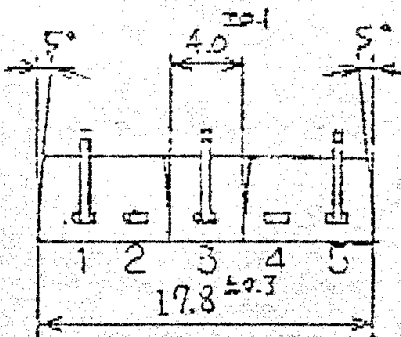
Description	Symbol	Conditions	Ratings	
Fixed Output Voltage	$V_O$	$I_{IN}=7mA, **1$	$3.0 \pm 1V$	
Temperature Coefficient of Output Voltage		$T_C=-20 \sim +100^{\circ}C$ $I_{IN}=6mA, **1$	$\pm 4.0mV/^{\circ}C$	
<b>Power Transistor</b>				
Collector Saturation Voltage	$V_{CE(sat)}$	$I_C=2A, I_B=0.4A$	1.0V Max.	
DC Current Gain	$h_{FE}$	$V_{CE}=4V, I_C=1A$	Min.14, Max.40	
Collector Cutoff Current	$I_{CEX}$	$V_{CE}=00V, V_{BE}=-1.5V$	1.0mA Max.	
Emitter Cutoff Current	$I_{EBO}$	$V_{BE}=5.5V$	1.0mA Max.	
Base Saturation Voltage	$V_{BE(sat)}$	$I_C=2A, I_B=0.4A$	1.5V Max.	
Thermal Resistance	$R_{th(j-c)}$	Junction to case	$1.8^{\circ}C/W$	
Switching Time		$V_{CE}=50V, I_C=1A$ $I_{B1}=0.1A, I_{B2}=0. A$ <b>**2</b>	$t_s$	13μsec Max
			$t_f$	1.0μsec Max

Fig. 1



Marking

- a. Type number: STR50300
- b. Lot number
  - 1st number for year
  - 2nd number for month
  - 1 ~ 9: Jan ~ Sept
  - O : Oct
  - N : Nov
  - D : Dec
- 3rd and 4th for date
- 01 ~ 31



- 1. Common
- 2. Base Drive
- 3. Input
- 4. Output
- 5. External Adjustment for Output Voltage