



SANKEN ELECTRIC COMPANY, LTD.

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

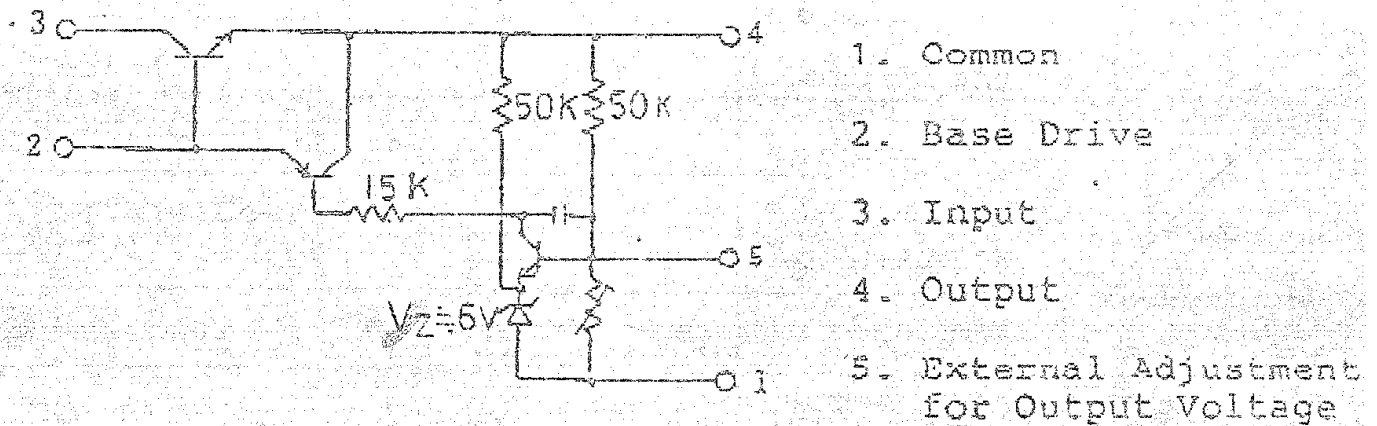
Sanken Hybrid IC Voltage Regulator STR50330

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.

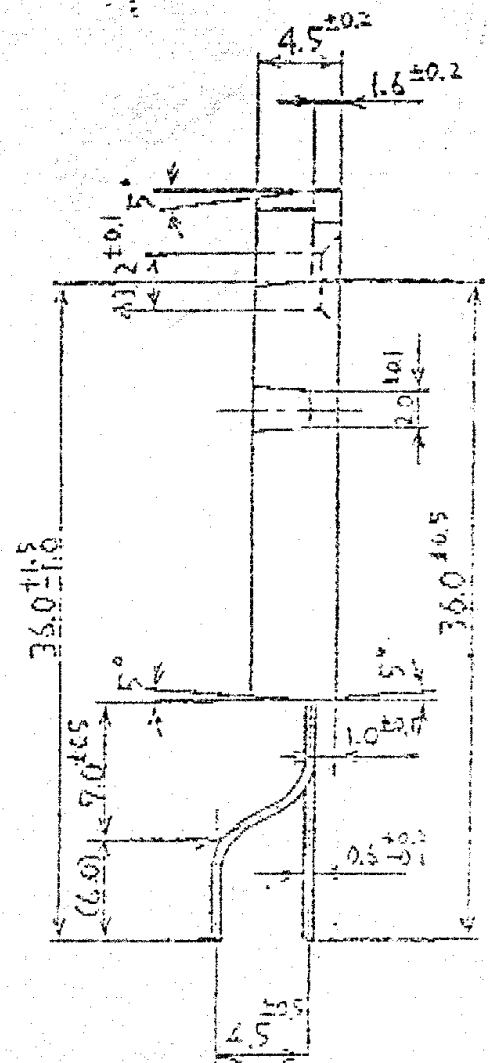
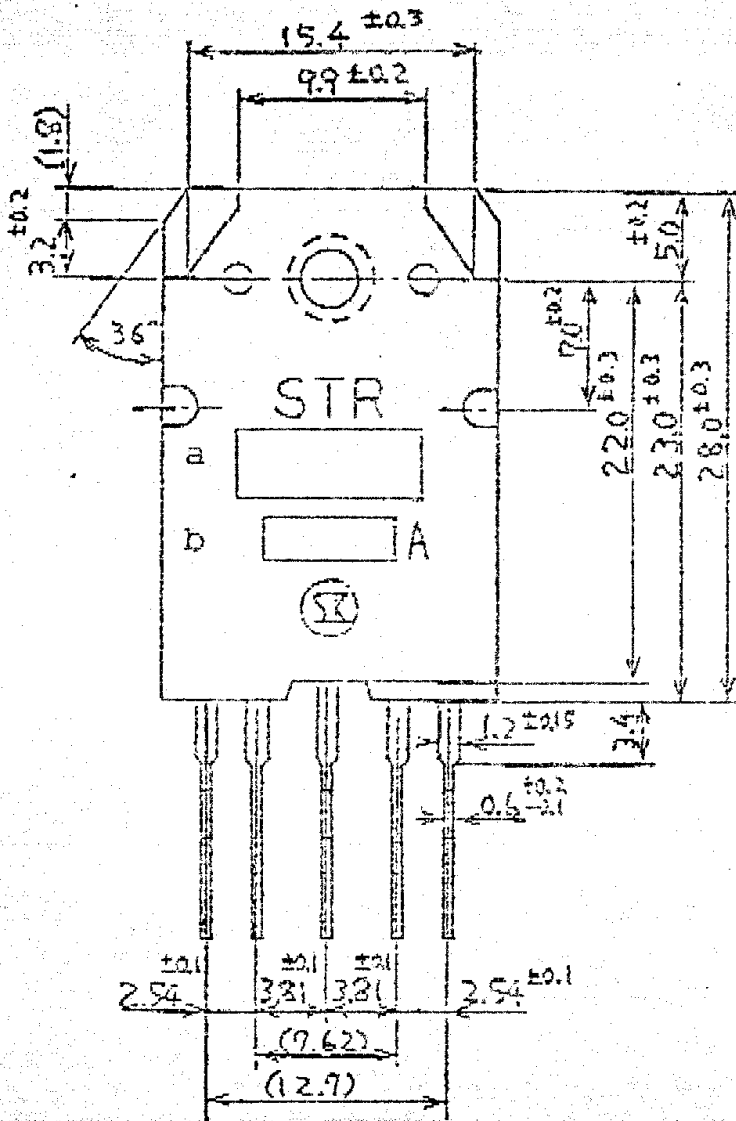
5. Maximum Ratings

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 ($T_C=100^\circ\text{C}$)
Operational Temperature	T_{op}	$^\circ\text{C}$	-20 ~ +125 (T_C)
Storage Temperature	T_{stg}	$^\circ\text{C}$	-30 ~ +125
Power Tr Junction Temperature	T_j	$^\circ\text{C}$	+150

6. Electrical Characteristics

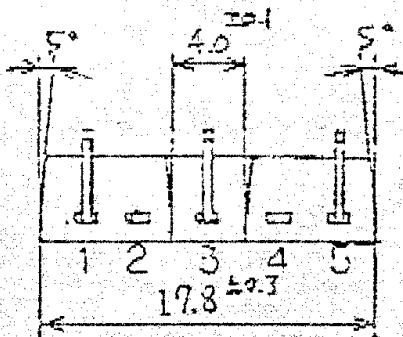
Description	Symbol	Conditions	Ratings	
Fixed Output Voltage	V_O	$I_{IN}=7\text{mA}$, **1	$3.0 \pm 1\text{V}$	
Temperature Coefficient of Output Voltage		$T_C=-20\sim+100^\circ\text{C}$ $I_{IN}=6\text{mA}$, **1	$\pm 4.0\text{mV}/^\circ\text{C}$	
Power Transistor				
Collector Saturation Voltage	$V_{CE(sat)}$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