



SANKEN ELECTRIC COMPANY, LTD.

S P E C I F I C A T I O N S
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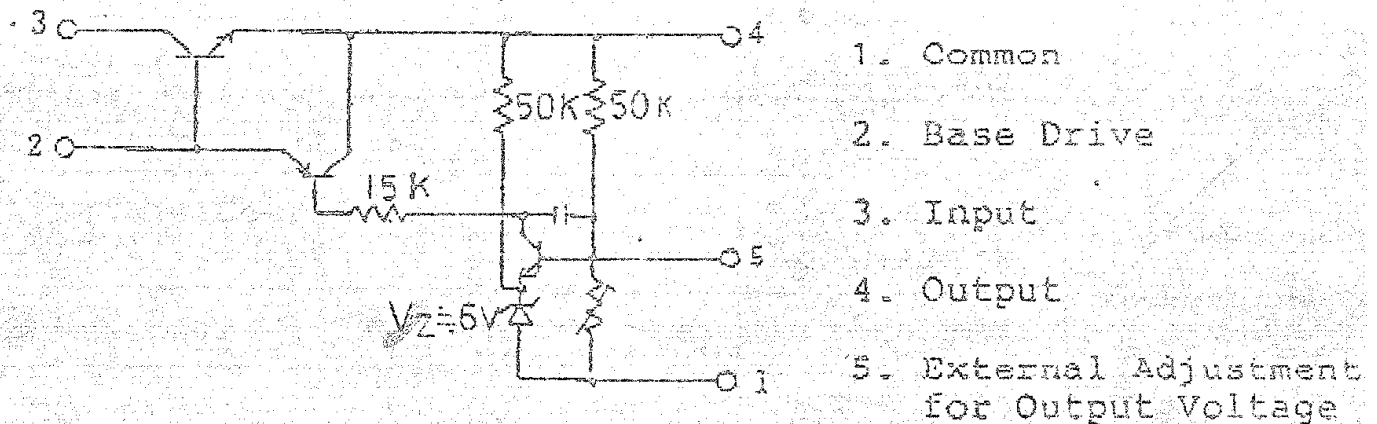
Sanken Hybrid IC Voltage Regulator STR50330

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.

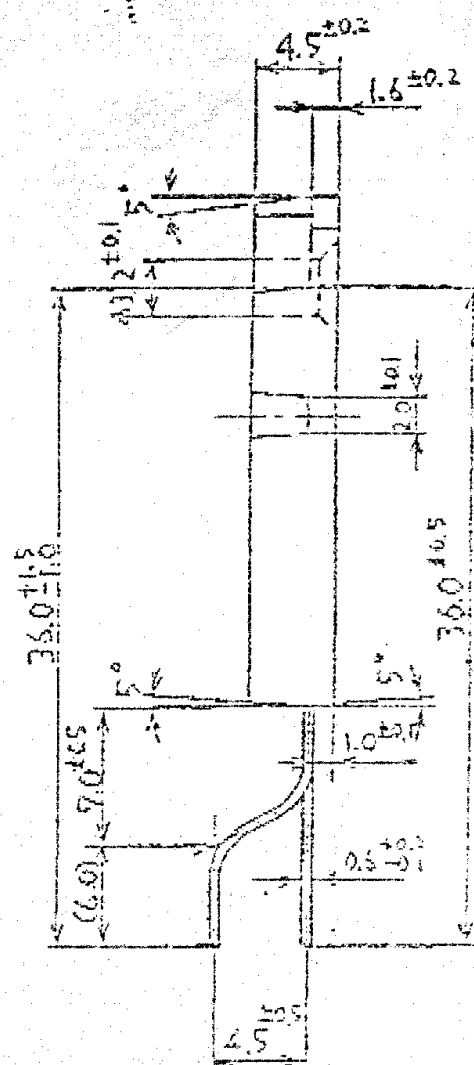
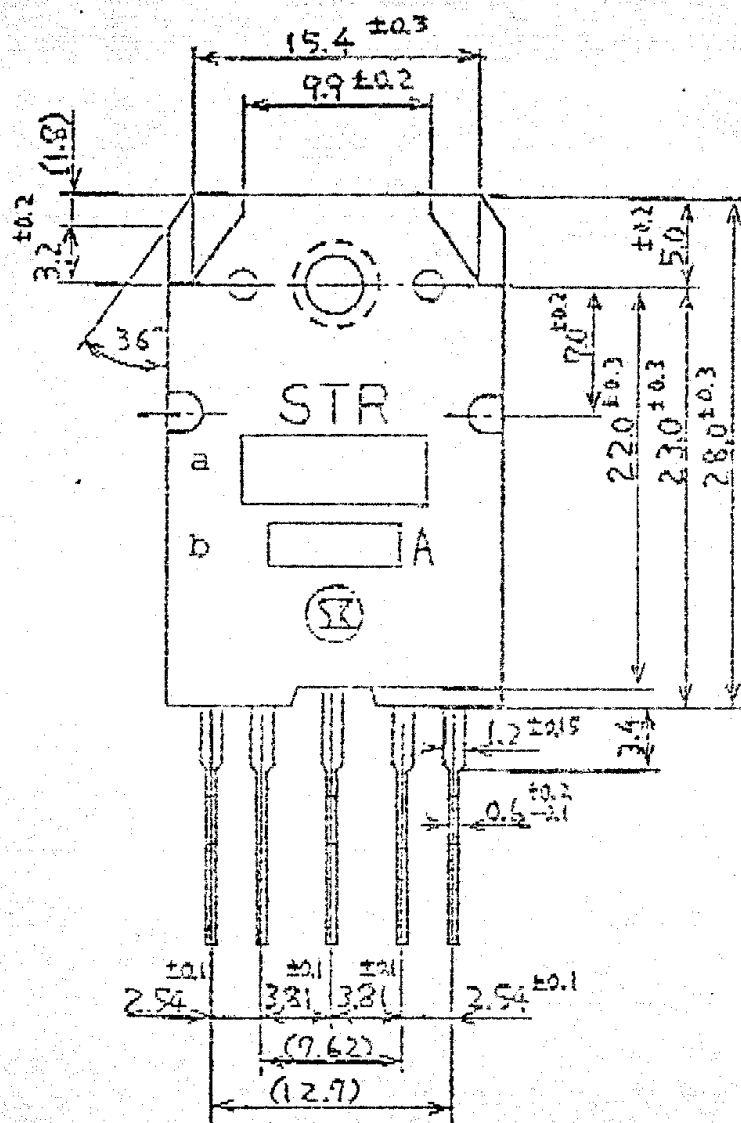
5. Maximum Ratings

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

6. Electrical Characteristics

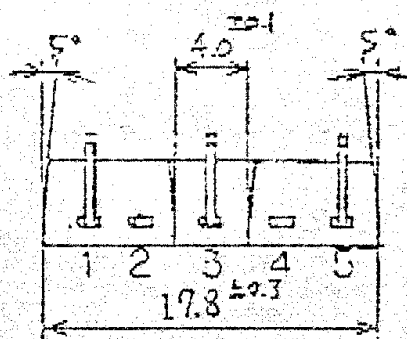
Description	Symbol	Conditions	Ratings
Fixed Output Voltage	V_O	$I_{IN}=7\text{mA}$, **1	$1.30 \pm 1\text{V}$
Temperature Coefficient of Output Voltage		$T_C=-20 \sim +100^{\circ}\text{C}$ $I_{IN}=6\text{mA}$, **1	$\pm 4.0\text{mV}/^{\circ}\text{C}$
Power Transistor			
Collector Saturation Voltage	$V_{CE(sat)}$	$I_C=2\text{A}$, $I_B=0.4\text{A}$	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	$V_{CE}=50\text{V}$, $I_C=1\text{A}$ $I_{B1}=0.1\text{A}$, $I_{B2}=0.\text{A}$ **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 Adjustent
for Output Voltage