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-

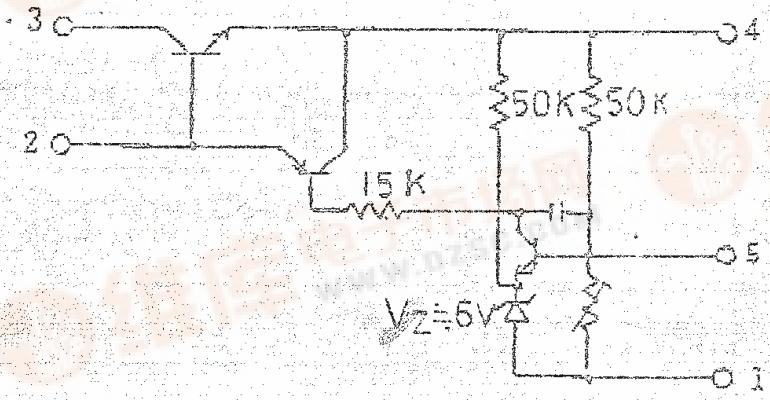
. Structure and Application

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



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

. 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.

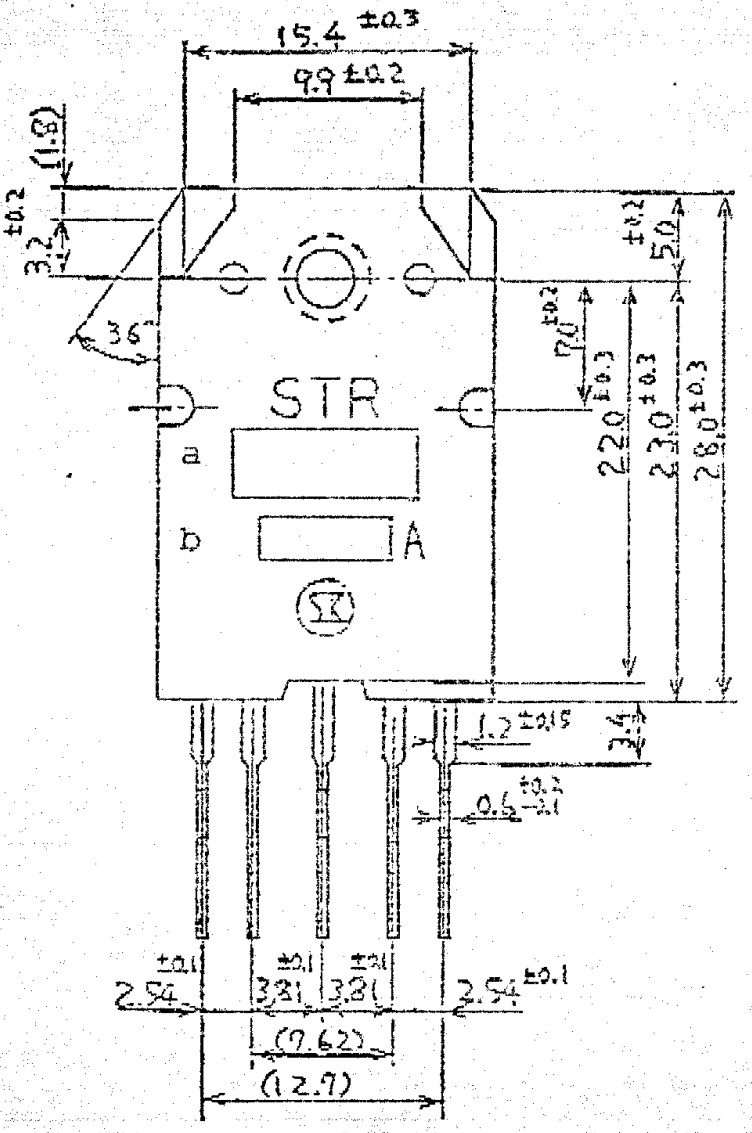
5. Maximum Ratings

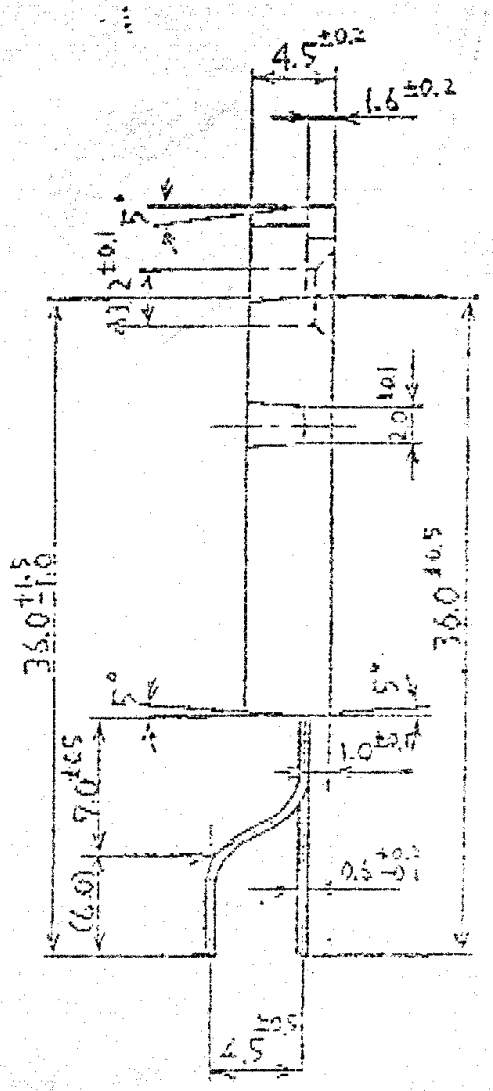
Description	Symbol	Unit	Ratings
Maximum Peak Input Voltage	V_{IN}	V	500
Input Current	I_{IN}	A	6
Maximum Power Dissipation	P_D	W	27 (T_C=100°C)
Operational Temperature	T_{op}	°C	-20 ~ +125(T_C)
Storage Temperature	T_{stg}	°C	-30 ~ +125
Power Tr Junction Temperature	T_j	°C	+150

6. Electrical Characteristics

Description	Symbol	Conditions	Ratings
Fixed Output Voltage	V_O	I_{IN}=7mA, **1	30 ± 1V
Temperature Coefficient of Output Voltage		T_C=-20~+100°C I_{IN}=6mA, **1	±4.0mV/°C
Power Transistor			
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°C/W
Switching Time		V_{CE}= 50V, I_C=1A I_{B1}=0.1 A, I_{B2}=0. A	t_s 3μsec Max

Fig.1





Marking

a. Type number: STR50330

b. Lot number

1st number for year

2nd number for month

1 ~ 9: Jan ~ Sept

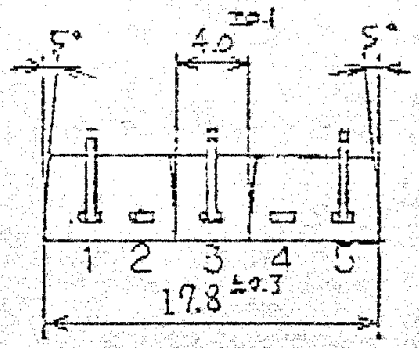
O : Oct

N : Nov

D : Dec

3rd and 4th for date

01 ~ 31



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