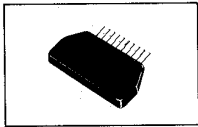




No. 1146



STK5314

Thick Film Hybrid Integrated Circuit
VOLTAGE REGULATOR

Features

- 2-output/1-package voltage regulator fabricated on Sanyo's original IMST substrate
- Provides cutoff function to cut off output voltage according to external signal.
- Output voltages of 2 outputs are set.

Maximum Ratings/ $T_a = 25^\circ\text{C}$

		Output 1	Output 2	unit
Maximum DC flow-in voltage	$V_i(\text{DC}) \text{ max}$	→	30	V
Operating case temperature	T_C	→	105	$^\circ\text{C}$
Maximum output current	I_o	1.6	4.0	A
Thermal resistance	θ_{j-c}	2.8	2.4	$^\circ\text{C/W}$
Junction temperature	T_j	→	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-30 ~ +105		$^\circ\text{C}$

Operating Characteristics/ $T_a = 25^\circ\text{C}$

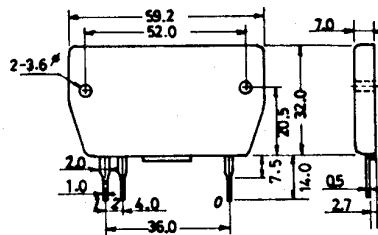
		Output 1			Output 2			unit
		min	typ	max	min	typ	max	
Output voltage setting	V_o *1	12.05±0.1			12.0±0.3			V
Input regulation	*2	20			20			mV/V
Load regulation	*3	30			30			mV/A
Pulse load regulation	*1, Output 2 $I_o = 3\text{A}$				11.6			V
Temperature coefficient	*1	0.02			0.02			%/ $^\circ\text{C}$
Ripple voltage	V_{rp} *1	1			20			mVrms
Output residual voltage at cutoff	*1	0.3			0.1			V
Output cutoff characteristic	*1							

Based on Application Circuit

- *1: Application circuit, at $V_{AC} = 100\text{V } 50\text{Hz}$
Output 1 1.1A input $v_i(\text{DC}) = 18.0\text{V typ}$
Output 2 1.0A input $v_i(\text{DC}) = 18.7\text{V typ}$
- *2: Application circuit
Output 1 1.1A input $v_i(\text{DC}) = 16 \text{ to } 22\text{V}$
Output 2 1.0A input $v_i(\text{DC}) = 14.5 \text{ to } 23\text{V}$
- *3: Application circuit, at $V_{AC} = 100\text{V } 50\text{Hz}$
Output 1 0 to 1.1A
Output 2 0 to 3A

Information furnished by SANYO is believed to be accurate and reliable. However, no responsibility is assumed by SANYO for its use; nor for any infringements of patents or other rights of third parties which may result from its use, and no license is granted by implication or otherwise under any patent or patent rights of SANYO.

Case Outline 4002
(unit: mm)

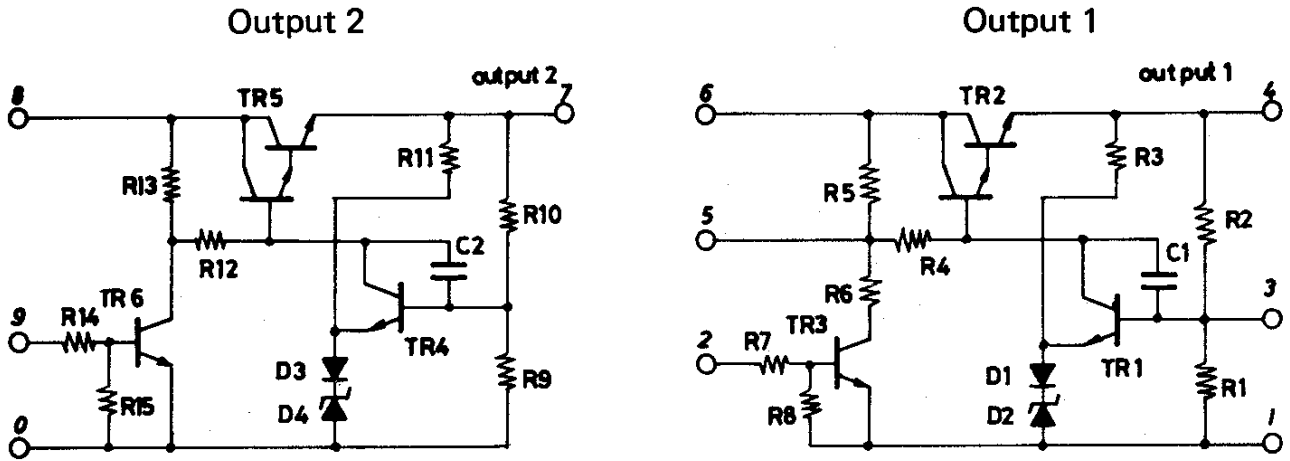


These specifications are subject to change without notice.

TOKYO SANYO ELECTRIC CO., LTD. SEMICONDUCTOR DIVISION
15-13, 6-CHOME, SOTOKANDA, CHIYODA-KU, TOKYO 101 JAPAN

STK5314

Equivalent Circuit



Application

