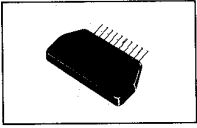


No. 1146



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

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

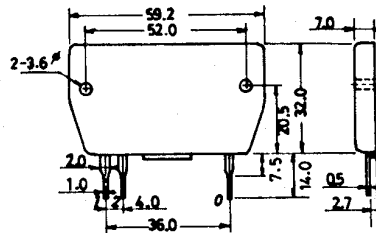
		Output 1			Output 2			unit
		min	typ	max	min	typ	max	
Output voltage setting	V_o *1	12.05±0.1			12.0±0.3			V
Input regulation	*2	20			20			mV/V
Load regulation	*3	30			30			mV/A
Pulse load regulation	*1, Output 2 $I_o = 3\text{A}$				11.6			V
Temperature coefficient	*1	0.02			0.02			%/ $^\circ\text{C}$
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 $v_i(\text{DC}) = 16$ to 22V
Output 2 1.0A input $v_i(\text{DC}) = 14.5$ to 23V
- *3 : Application circuit, at $V_{AC} = 100\text{V } 50\text{Hz}$
Output 1 0 to 1.1A
Output 2 0 to 3A

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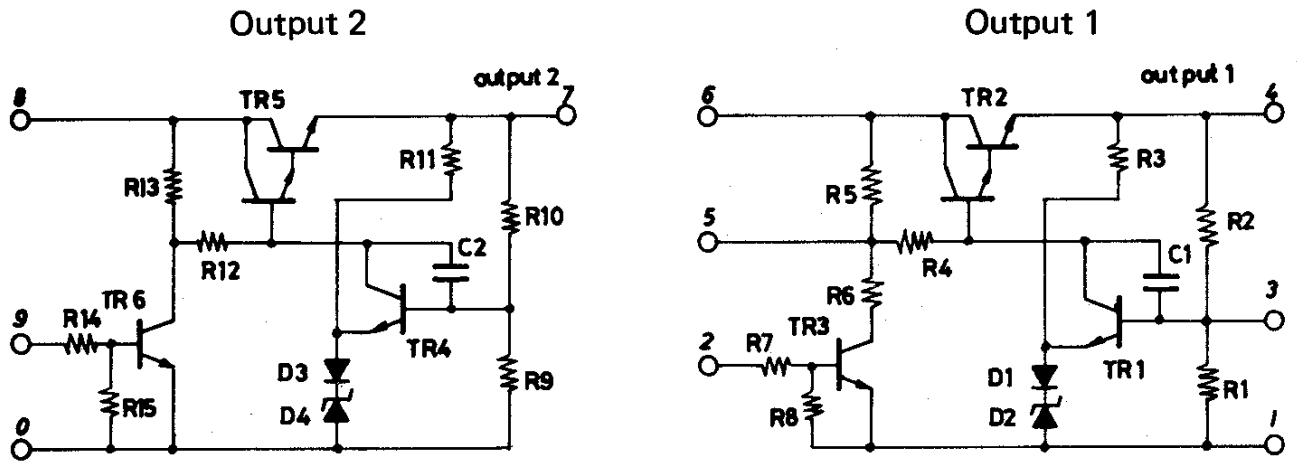
Case Outline 4002
(unit: mm)



These specifications are subject to change without notice.

STK5314

Equivalent Circuit



Application

