

No.1493

STK5422

Thick Film Hybrid Integrated Circuit
4-OUTPUT SERIES REGULATOR
FOR VTR APPLICATIONS

Features

1. 4-output/1-package voltage regulator fabricated using Sanyo's original IMST (Insulated Metal Substrate Technology).
2. Provides cutoff function to cut off output voltage according to external signal.
3. Output voltages of 4 outputs are set.
4. Small size and excellent cost performance.

Maximum Ratings at Ta=25°C

		Vo1	Vo2	Vo3	Vo4	unit
Maximum Output Current	Iomax	Average/1/2.5	1/2	0.5/1	1/2	A
Maximum DC Input Voltage	Vin(DC)max	→	→	→	30	V
Thermal Resistance	θj-c	→	→	→	4.5	°C/W
Operating Case Temperature	Tc	→	→	→	105	°C
Junction Temperature	Tj	→	→	→	150	°C
Storage Temperature	Tstg	→	→	→	-30~+105	°C

Operating Characteristics at Ta=25°C

		Vo1	Vo2	Vo3	Vo4	unit
Output Voltage Setting	Condition 1	13.0 ±0.3	9.5 ±0.1	12.0 ±0.3	12.0 ±0.3	V
Ripple Rejection	Condition 2	*5	5	5	5mVppmax	
Output Cutoff Characteristic	1V or less ON with- 3V or more OFF out	with	with	with- out	with	
Temperature Coefficient	Condition 1	→	→	→	0.02%/°Cmax	
Input Regulation	Condition 3	30	35	35	35mV/Vmax	
Load Regulation	Condition 4	45	35	35	35mV/Amax	
Minimum Input-Output Vol- tage Difference	Condition 5	1.2	-	1.2	1.2	Vmax

Condition 1: Vin(DC)1=18V Vin(DC)2=15V, Io1=1.8A, Io2, Io4=1A, Io3=0.5A

Condition 2: Vin(DC)1=18V Vin(DC)2=15V, Io1=1.8A, Io2, Io4=1A, Io3=0.5A

Input ripple=1.5Vpp, *: Output noise of Vo1: 50mVppmax

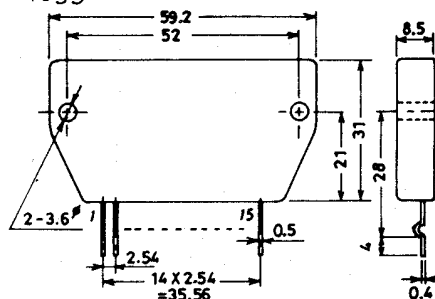
Condition 3: Vin(DC)1=18V±3V, Vin(DC)2=15V±2V,

Io1=1.8A, Io2, Io4=1A, Io3=0.5A

Condition 4: Vin(DC)1=18V, Vin(DC)2=15V, Io1, Io2, Io4=0.2 to 2.0A Io3=0 to 1A

Condition 5: Io1=1.8A, Io2, Io4=1A, Io3=0.5A

Case Outline 4033 (unit:mm)



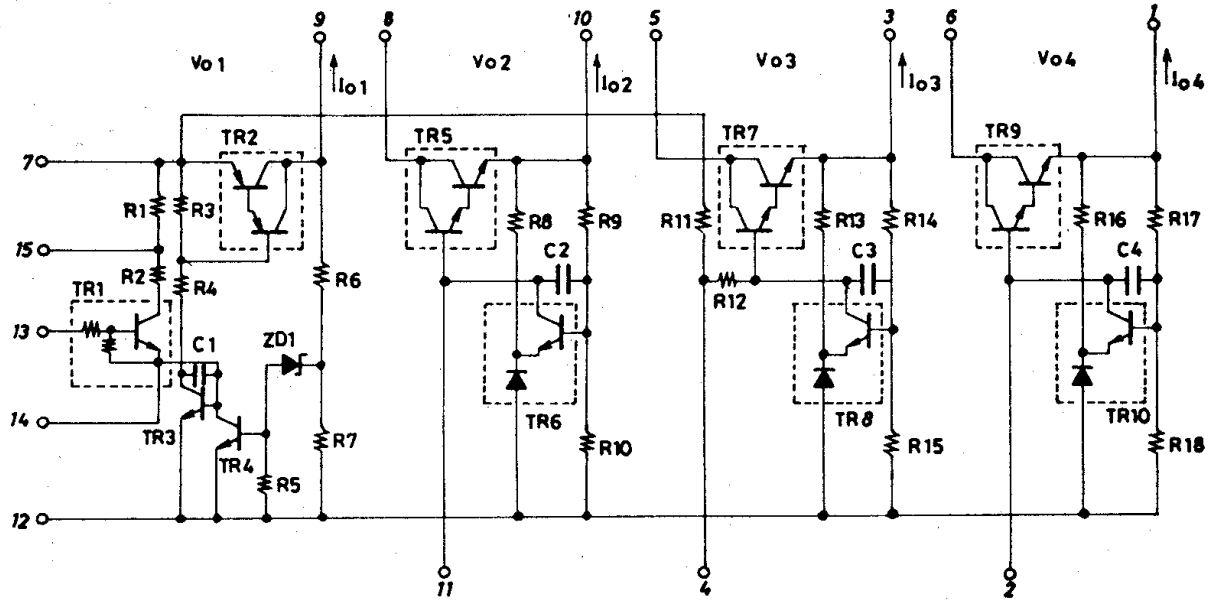
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Equivalent Circuit



※ : Pin 13 : Vo1 cutoff pin

Test Circuit

