

No.1492

**STK5421**

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/Peak	1/2.5	1/2	1/3	0.5/1	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	16.0 ±0.3	9.55 ±0.1	12.0 ±0.3	12.3 ±0.3	V
Ripple Rejection	Condition 2	*5	3	5	3mVppmax	
Output Cutoff Characteristic	1V or less ON 3V or more OFF	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 Voltage Difference	Condition 5	1.2	-	1.2	1.2 Vmax	

Condition 1: Vin(DC)1=21V, Vin(DC)2=15V, Io1=2A, Io2, Io3=1A, Io4=0.5A

Condition 2: Vin(DC)1=21V, Vin(DC)2=15V, Io1=2A, Io2, Io3=1A, Io4=0.5A

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

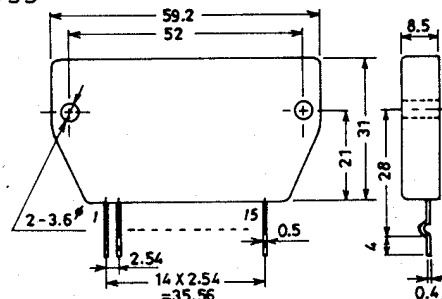
Condition 3: Vin(DC)1=21V±3V, Vin(DC)2=15V±2V,

Io1=2A, Io2, Io3=1A, Io4=0.5A

Condition 4: Vin(DC)1=21V, Vin(DC)2=15V, Io1, Io2, Io3=0.2 to 2.0A, Io4=0 to 1A

Condition 5: Io1=2A, Io2, Io3=1A, Io4=0.5A

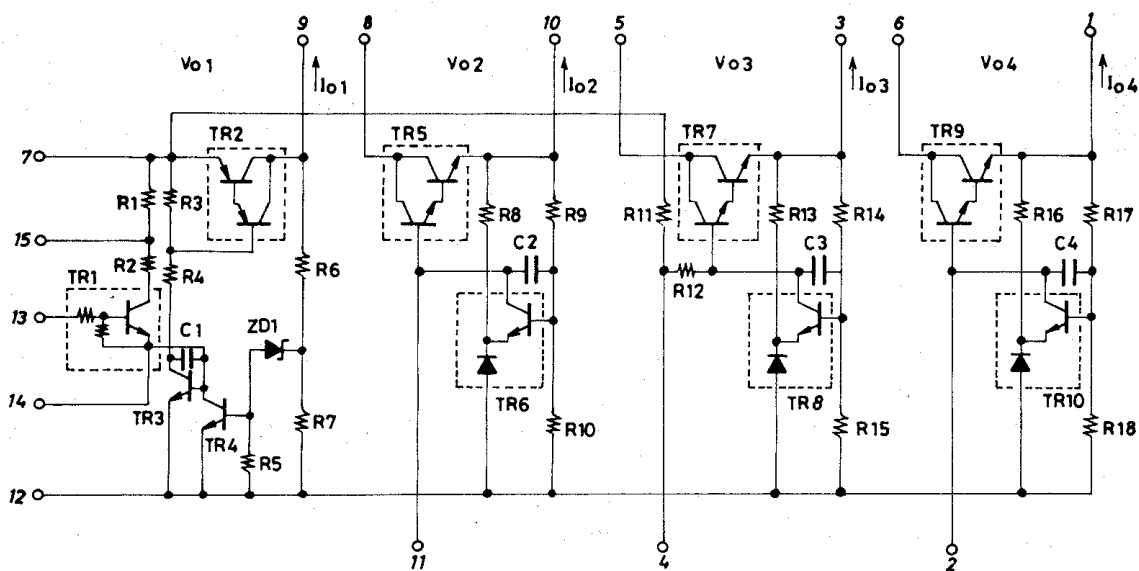
**Case Outline 4033**  
(unit:mm)



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Equivalent Circuit



Test Circuit

