

## 3-Output Series Regulator for VTR Use

### Features

- 3-output/1-package voltage regulator fabricated using Sanyo's original IMST (Insulated Metal Substrate Technology)
- Cutoff function to cut off 2 output voltages by external signal
- Contains 3 outputs of Vo1/Vo2, Vo3, Vo4 in a single package. Either of Vo1/Vo2 is external signal-selectable.
- Output voltages of 3 outputs are set.
- Small size and excellent cost performance

### Maximum Ratings at Ta = 25°C

		Vo1	Vo2	Vo3	Vo4	unit
Maximum DC Input Voltage	Vin (dc) max	40	35	35	35	V
Maximum Output Current	Io max av.	1.0	1.0	1.5	1.5	A
	pk (0.2sec or less)	2.5	2.5	2.5	2.5	A
Thermal Resistance	θj-c	4.5	4.5	4.5	4.5	°C/W
Operating Case Temperature	Tc	105	105	105	105	°C
Junction Temperature	Tj max	150	150	150	150	°C
Storage Temperature	Tstg	-30 to	-30 to	-30 to	-30 to	°C
		+105	+105	+105	+105	

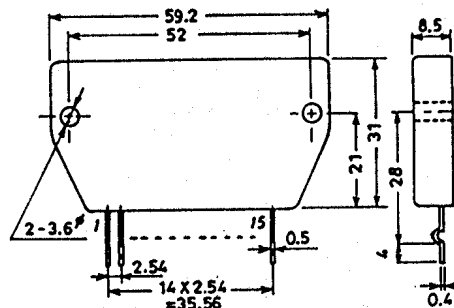
### Operating Characteristics at Ta = 25°C, See specified Test Circuit.

		Vo1	Vo2	Vo3	Vo4	unit
Output Voltage Setting	Condition 1,**	16.0 ± 0.3		12.0 ± 0.1	11.9 ± 0.2	V
	Condition 1,***		12.0 ± 0.3	12.0 ± 0.1	11.9 ± 0.2	V
Ripple Voltage	Condition 2	20	20	5	5	mVpp max
Temperature Coefficient of Output Voltage	Condition 1	0.02	0.05	0.02	0.02	%/°C max
Line Regulation	Condition 3	35	50	35	35	mV/V max
Load Regulation	Condition 4	40	100	35	35	mV/A max
Minimum Input-Output Voltage Drop	Condition 5	2.5	1.2	1.2	1.2	V max
Vo1/Vo2 Select	Condition 1	**	: Vo1 ON			
		***	: Vo2 ON			
Output ON	Condition 1	**	: Vo1 or Vo2, Vo3 ON			
		***	: Vo1 or Vo2, Vo3 OFF			
		****	: Output 4 is always ON.			

Minimum Output Current - - - - - 10 mA min

### Case Outline 4033 (unit: mm)

The application circuit diagrams and circuit constants herein are included as an example and provide no guarantee for designing equipment to be mass-produced. The information herein 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.

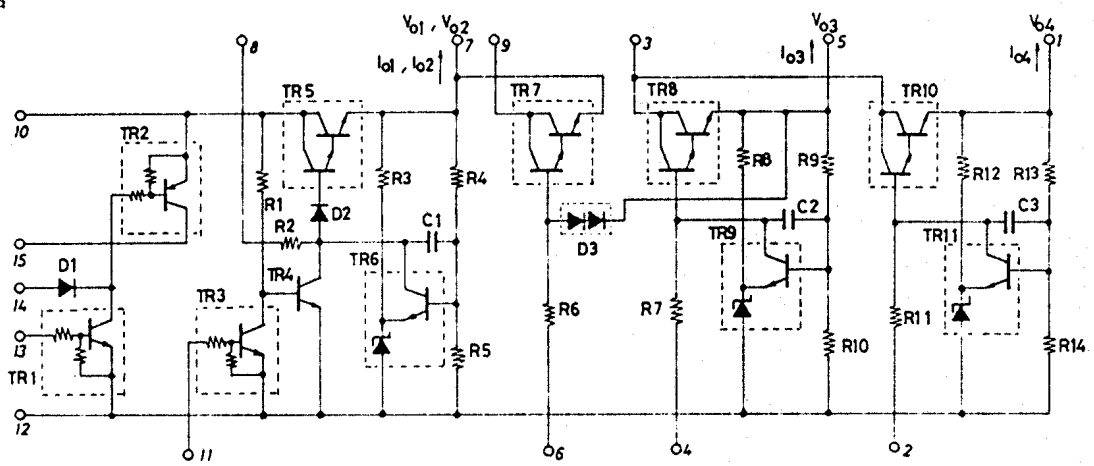


Specifications and information herein are subject to change without notice.

- Condition 1 Input :  $V_{in} (dc) 1 = 21V$ ,  $V_{in} (dc) 2 = 16V$   
Output :  $I_{o1}$  or  $I_{o2} = I_{o4} = 0.5A$ ,  $I_{o3} = 0.8A$
- Condition 2 Input/output conditions are the same as Condition 1. Input ripple voltage 1.5Vpp
- Condition 3 Input :  $V_{in} (dc) 1 = 19$  to  $25V$ ,  
 $V_{in} (dc) 2 = 14$  to  $18V$   
Output :  $I_{o1}$  or  $I_{o2} = I_{o4} = 0.5A$ ,  $I_{o3} = 0.8A$
- Condition 4 Input :  $V_{in} (dc) 1 = 21V$ ,  $V_{in} (dc) 2 = 16V$   
Output :  $I_{o1}$  or  $I_{o2} = I_{o3} = I_{o4} = 0.2$  to  $2.5A$
- Condition 5 Output :  $I_{o1}$  or  $I_{o2} = I_{o4} = 0.5A$ ,  $I_{o3} = 0.8A$

- \*\* Pin 11 or 13 'H' (3V or more, 15V or less)
- \*\*\* Pin 11 or 13 'L' (1.2V or less)
- \*\*\*\* Pin 11 or 13 'H', 14 'L'

**Equivalent Circuit**



**Application Characteristics (Based on Test Circuit)**

