

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 | |

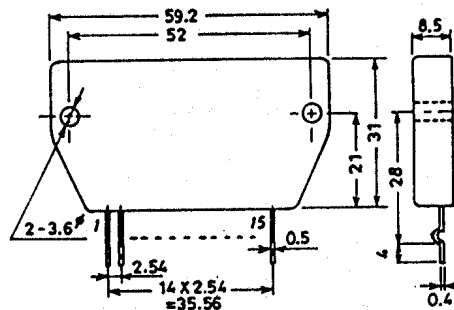
Operating Characteristics at Ta = 25°C, See specified Test Circuit.

| | | 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.

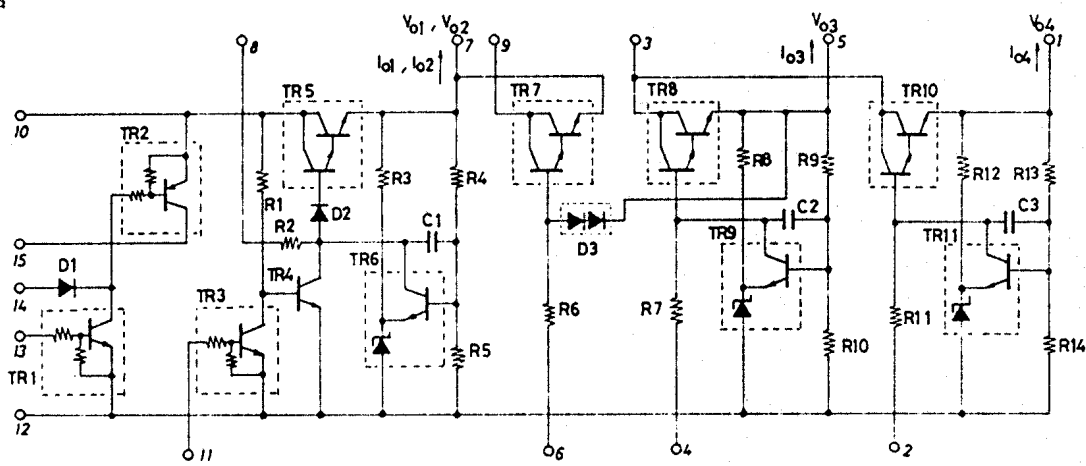


Specifications and information herein are subject to change without notice.

- 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)

