

SANYO**STK5471**

Thick Film Hybrid IC

Voltage Regulator for VTR

TENTATIVE

Case Outline : 10 pins (See attached case outline drawing.)

Functions : Series regulator

Applications : Voltage regulator for VTR

Features : 3 outputs, output cutoff function

Maximum Ratings at $T_a = 25^\circ\text{C}$

		Vo1	Vo2	Vo3	unit	
Storage Temperature	Tstg	→	→	-30 to +105	°C	
Operating Case Temperature	Tc max	→	→	105	°C	
Maximum DC Input Voltage	Vin (DC) max	30	30	20	V	
Maximum Output Current*2	Io max	Average	1.5	1.5	0.5	A
		Peak	2.5	2.5	0.5	A
Junction Temperature	Tj max	→	→	150	°C	
Thermal Resistance	θ_{j-c}	4.5	4.5	10	°C/W	

Electrical Characteristics at $T_a = 25^\circ\text{C}$

	Condition	Vo1	Vo2	Vo3	unit
Output Voltage Setting*1	①	12.0 ± 0.3	12.0 ± 0.1	5.3 ± 0.1	V
Ripple Voltage	②	20	5	5	mVp-p max
Output Cutoff Function	3V or greater ON				
	0.6V or less OFF	Without	Without	With	
Temperature Coefficient	③	→	→	0.02	%/°Cmax
Line Regulation	④	80	35	5	mV/V max
Load Regulation	⑤	150	40	100	mV/A max
Minimum Input-Output Voltage Difference	⑥	1.5	1.5	2.7	V max

Condition ① : Vin(DC)1 = 16V, Vin(DC)2 = 9V, Io1 = Io2 = 1A, Io3 = 0.5A, (IB1 = IB2 = 2mA)

Condition ② : Vin(DC)1 = 16V, Vin(DC)2 = 9V, Io1 = Io2 = 1A, Io3 = 0.5A, input ripple voltage = 1.5Vp-p

Condition ③ : Vin(DC)1 = 14.5V to 22V, Vin(DC)2 = 8.1V to 11V, Io1 = Io2 = 1A, Io3 = 0.5A

Condition ④ : Vin(DC)1 = 16V, Vin(DC)2 = 9V, Io1 = 0.3A to 1A, Io2 = 0.1A to 1A, Io3 = 0.1A to 0.5A

Condition ⑤ : Io1 = Io2 = 1A, Io3 = 0.5A, IB1 = IB2 = 2mA

*1. Measurement must be made within 1 to 2sec. after input switch ON in the STK5471 Test Circuit.

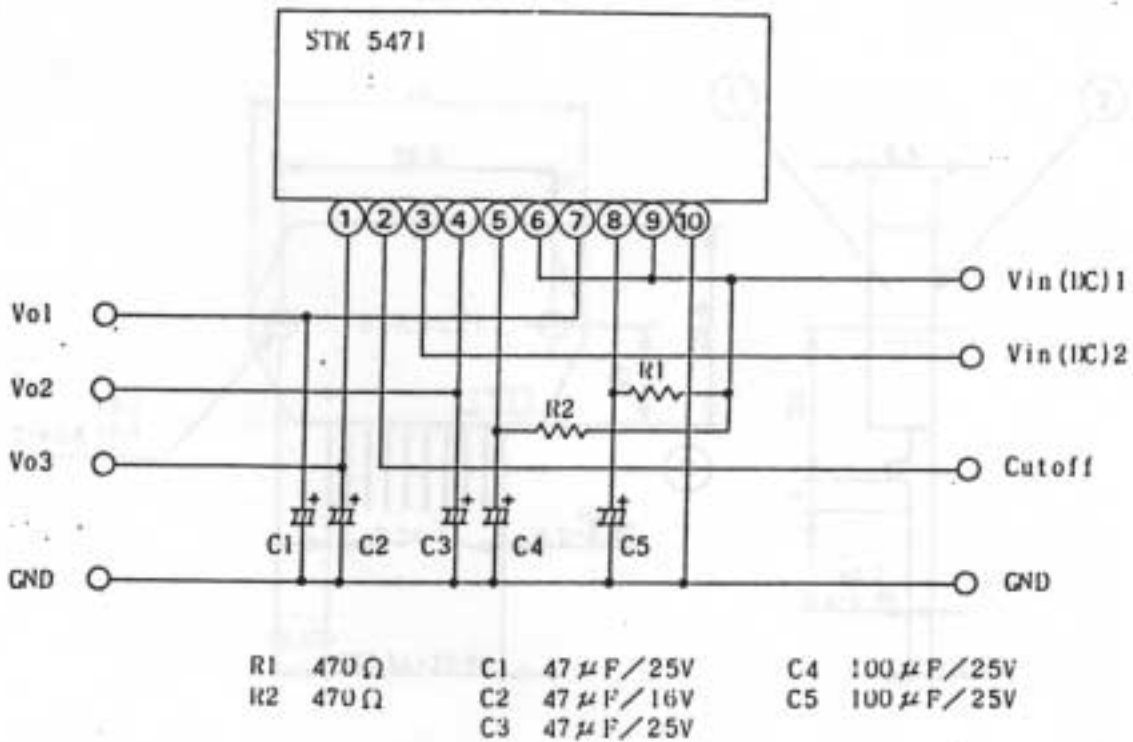
*2. Peak current : For 1.0sec. max (Vin(DC)1 = 15.7V, Vin(DC)2 = 9V)

Specifications and information herein are subject to change without notice.

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STK5471 Test Circuit



STK5471 Internal Equivalent Circuit

