

AN5762, AN5763

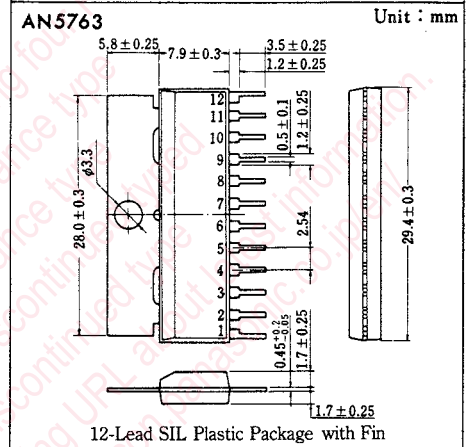
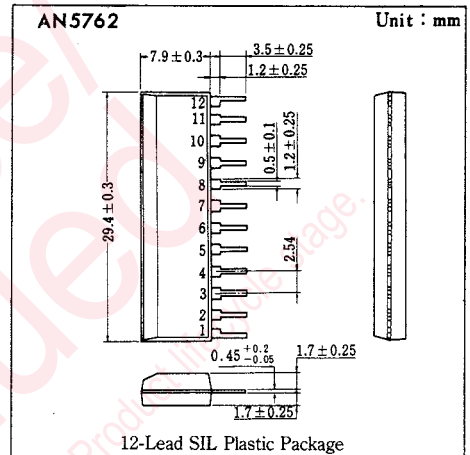
B/W TV Vertical Deflection Signal Processing and Output Circuits

■ Outline

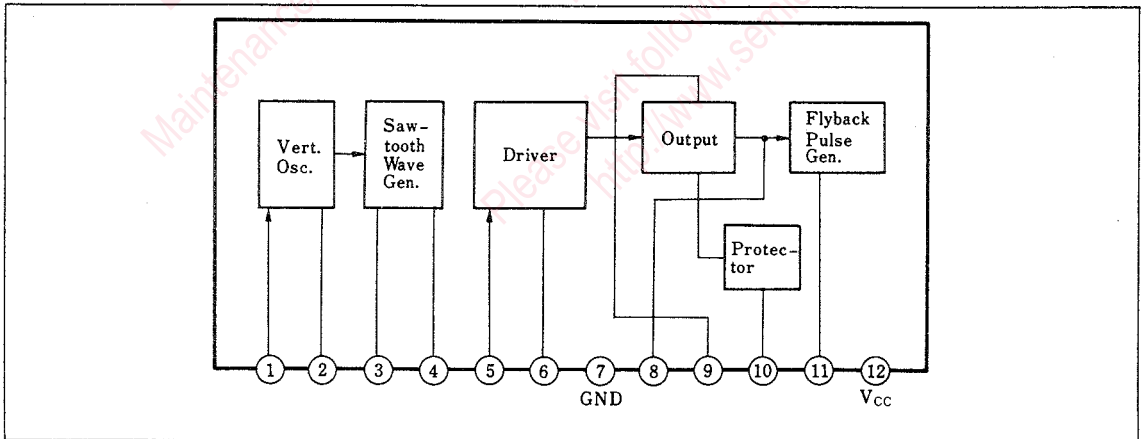
The AN5762 and the AN5763 are one of IC's for the AN5700 series 12V operating Black/White TV. They are integrated circuits designed for B/W TV vertical deflection signal processing and output circuits.

■ Features

- Flyback pulse processing is highly efficient by pulse up system
- Level switch type oscillator circuit is incorporated, realizes economical circuitry with fewer external components
- Vertical oscillator circuit featuring highly stable operation against change in temperature and supply voltage



■ Block Diagram



■ Absolute Maximum Ratings(Ta=25°C)

Item		Symbol	Rating	Unit
Supply Voltage	AN5762	V _{CC}	13.8	V
	AN5763		15.6	
Power Dissipation	AN5762	P _D	930	mW
	AN5763		1330	
Temperature	Operating Ambient Temperature	T _{opr}	-20~+70	°C
	Storage Temperature	T _{stg}	-40~+150	°C

■ Electrical Characteristics(Ta=25°C)

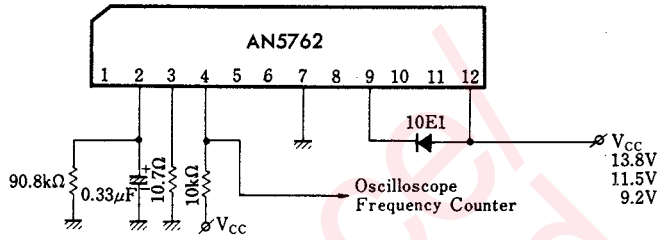
AN5762

Item	Symbol	Test Circuit	Condition	min.	typ.	max.	Unit
Circuit Current (1)	I ₁₂		V _{CC} =11.5 V no-load	10	15	20	mA
Circuit Current (2)	I ₁₂		V _{CC} =11.5 V, R _L =34 Ω	240	280	320	mA
Vertical Oscillation Starting Voltage	V _{osc-s(v)}	1	It shall be within f _{vo} =40~70Hz.	5.0			V
Vertical Oscillation Frequency	f _{VO}	1	V _{CC} =11.5 V	48	50	52	Hz
f _{vo} Change with Supply Voltage	Δf _{vo} /V _{CC}	1	f _{vo} 9.2 V-f _{vo} 13.8 V		0	1	Hz
f _{vo} Change with Ambient Temperature	Δf _{vo} /T _a	1	f _{vo} -20°C-f _{vo} 60°C		0	1	Hz
Vertical Output Pulse Width	τ _(VO)	1	V _{CC} =11.5 V, Sync. State	260	330	390	μs
Vertical Pull-in Range	f _{VP}	2	V _{CC} =11.5 V, Sync. State	18	20		Hz
Deflection Current(Peak)	I _{Y(P-P)}	3	V _{CC} =11.5 V, Sync. State R _H =98kΩ	175	185	195	mA _{P-P}
Center Voltage	V _{MID}	3	V _{CC} =11.5 V, Sync. State R _H =117kΩ	5.4	5.8	6.15	V
Flyback Pulse Amplitude	V _(FBP)	3	V _{CC} =11.5 V, Sync. State R _H =98kΩ	20.5	22		V
Blanking Pulse Width	τ _(BLP)	3	V _{CC} =11.5 V, Sync. State R _H =117kΩ	440	460	480	μs
Output Tr. Saturation Voltage	V ₁₂₋₈	3	V _{CC} =11.5 V, R _L =34 Ω		2.0	2.3	V

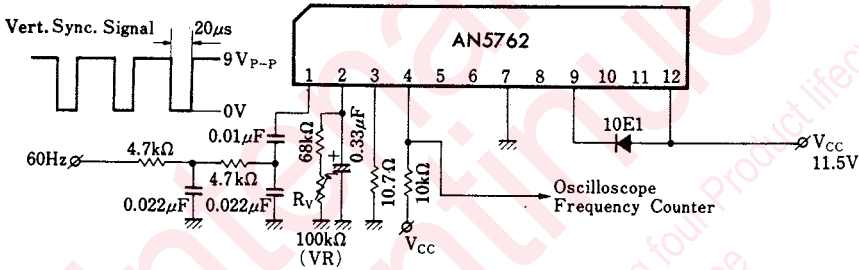
AN5763

Item	Symbol	Test Circuit	Condition	min.	typ.	max.	Unit
Circuit Current (1)	I ₁₂		V _{CC} =11.5 V, no-load	8.5	13.5	18.5	mA
Circuit Current (2)	I ₁₂		V _{CC} =11.5 V, R _L =25 Ω	350	400	450	mA
Vertical Oscillation Starting Voltage	V _{osc-s(v)}	4	It shall be within f _{vo} =40~70Hz.	5.0			V
Vertical Oscillation Frequency	f _{VO}	4	V _{CC} =11.5 V	48	50	52	Hz
f _{vo} Change with Supply Voltage	Δf _{vo} /V _{CC}	4	f _{vo} 9.2 V-f _{vo} 13.8 V		0	1	Hz
f _{vo} Change with Ambient Temperature	Δf _{vo} /T _a	4	f _{vo} -20°C-f _{vo} 60°C		0	1	Hz
Vertical Output Pulse Width	τ _(VO)	4	V _{CC} =11.5 V, Sync. State	250	330	400	μs
Vertical Pull-in Range	f _{VP}	5	V _{CC} =11.5 V, Sync. State	18	20		Hz
Deflection Current(Peak)	I _{Y(P-P)}	6	V _{CC} =11.5 V, Sync. State R _H =88k	665	715	750	mA _{P-P}
Center Voltage	V _{MID}	6	V _{CC} =11.5 V, Sync. State R _H =96.4kΩ	5.3	5.65	6.0	V
Flyback Pulse Amplitude	V _(FBP)	6	V _{CC} =11.5 V, Sync. State R _H =96.4kΩ	20	21.5		V
Blanking Pulse Width	τ _(BLP)	6	V _{CC} =11.5 V, Sync. State R _H =96.4kΩ	690	760	840	μs
Output Tr. Saturation Voltage	V ₁₂₋₈	6	V _{CC} =11.5 V, R _L =25 Ω		2.0	2.3	V

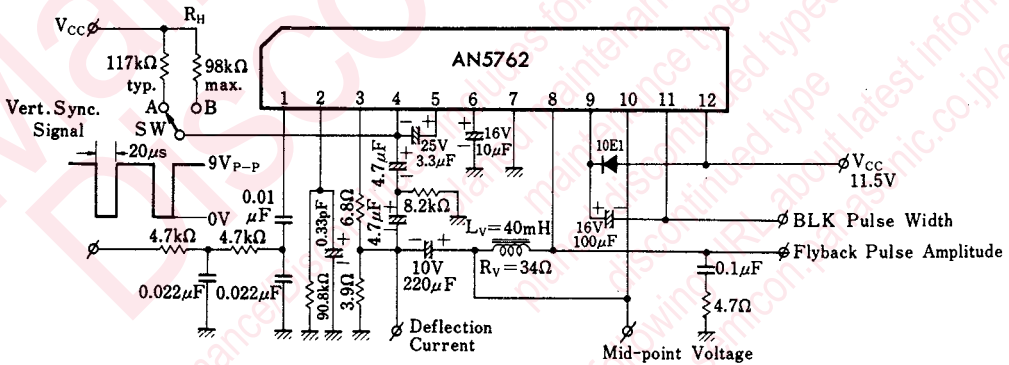
Test Circuit 1 ($V_{osc-S(V)}$, f_{VO} , $\Delta f_{VO}/V_{CC}$, $\Delta f_{VO}/T_a$, $\tau_{(VO)}$)



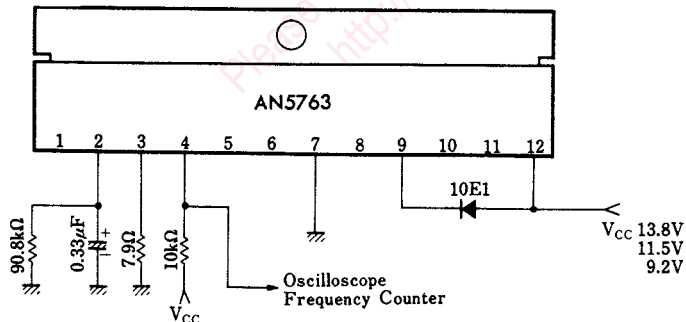
Test Circuit 2 (f_{VP})



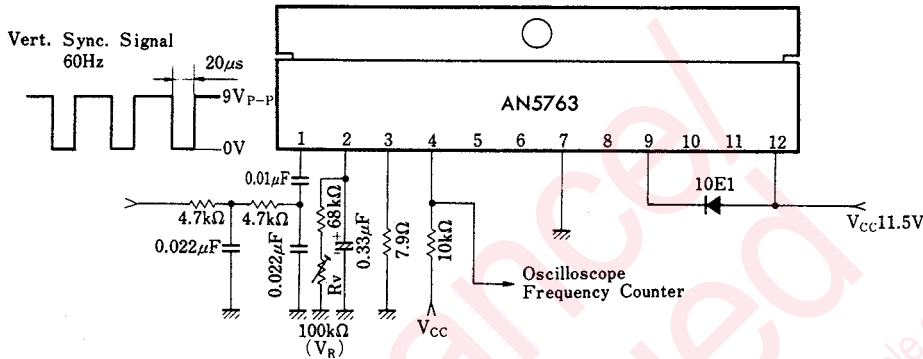
Test Circuit 3 ($I_{y(P-P)}$, V_{MID} , $V_{(FBP)}$, $\tau_{(BLP)}$, V_{12-8})



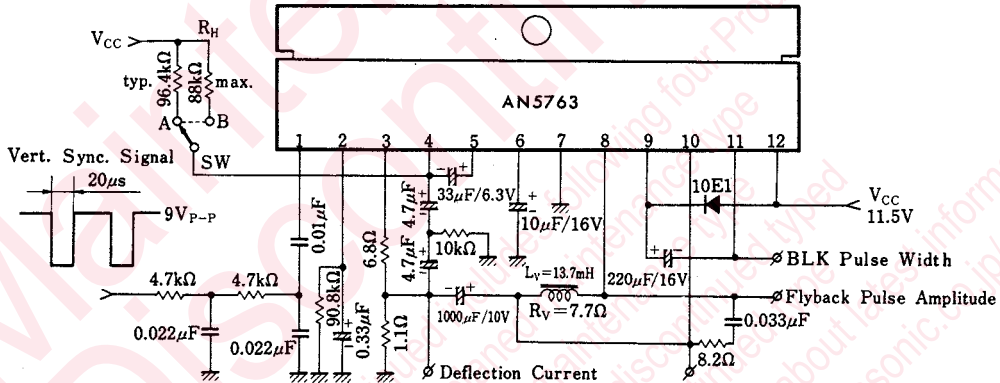
Test Circuit 4 ($V_{osc-S(V)}$, f_{VO} , $\Delta f_{VO}/V_{CC}$, $\Delta f_{VO}/T_a$, $\tau_{(VO)}$)



Test Circuit 5 (f_{VP})



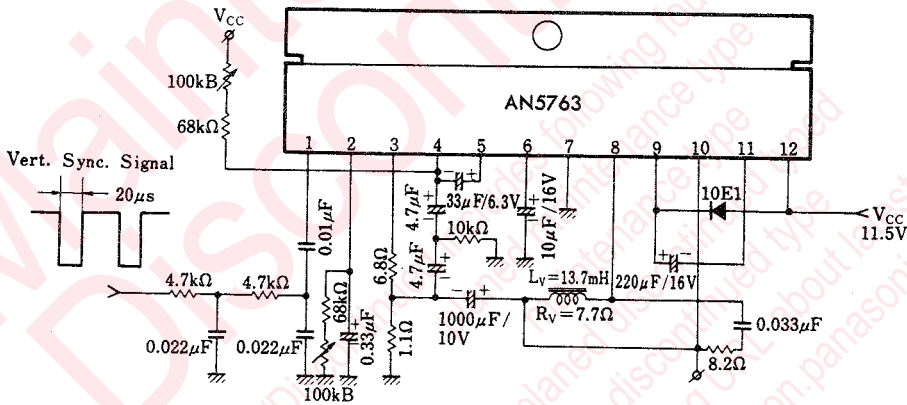
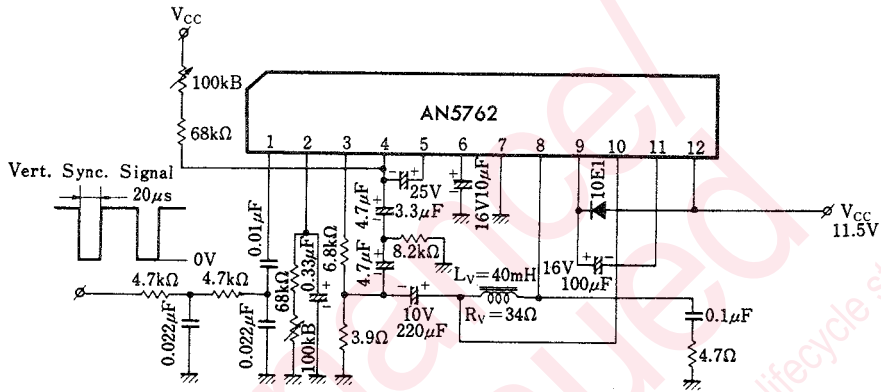
Test Circuit 6 ($I_{Y(P-P)}$, V_{MID} , $V_{(FBP)}$, $\tau_{(BLP)}$, V_{12-8})



■ Pin

Pin No.	Pin Name
1	Sync. Input
2	Saw-tooth Wave Generation
3	Adj. for Linearity
4	Vert. Osc. Output
5	Input for Vert. Amp.
6	Decoupling
7	GND
8	Vert. Output
9	Voltage Source for Vert. Circuit
10	Protector
11	BLK Pulse Output
12	V _{cc}

■ Application Circuits



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