

AN5530K

TV Vertical Deflection Output Circuit

Outline

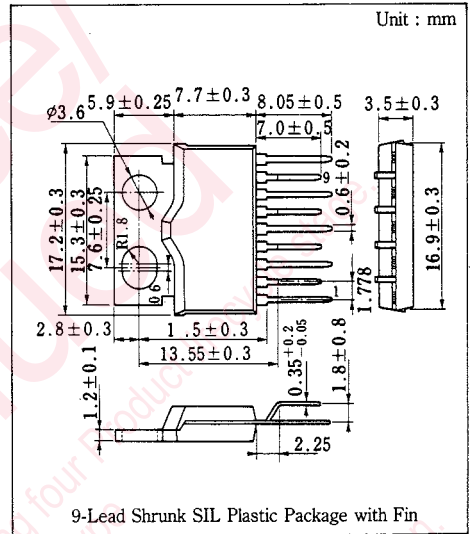
The AN5530K is an integrated circuit designed for TV vertical deflection output circuit. Combining with the deflection signal processing IC can facilitate the vertical output circuit design.

Features

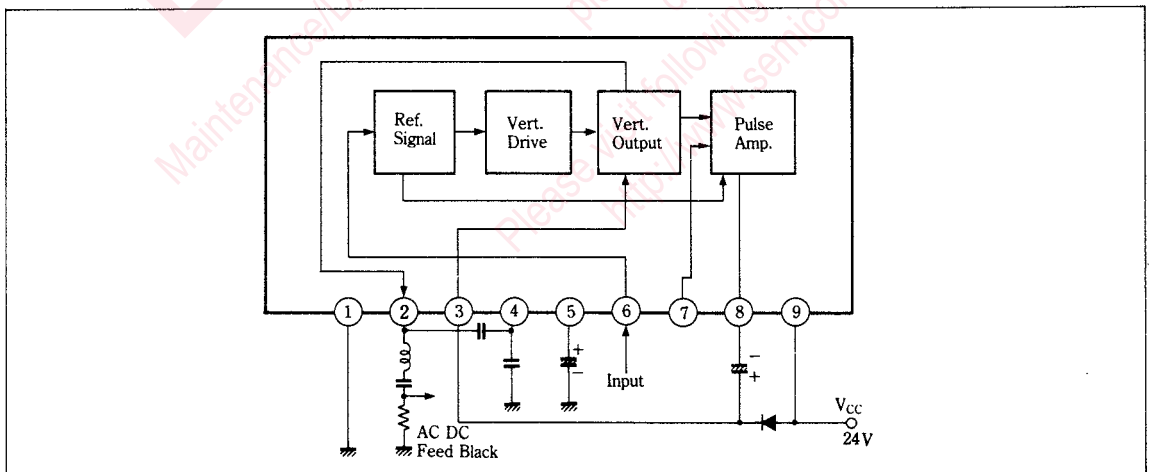
- Low power consumption, direct deflection coil driving capability (Flyback voltage two times as high as supply voltage is supplied during flyback period only)
- Internal comparator

Pin

Pin No.	Pin Name
1	GND
2	Output
3	Supply Voltage for Output
4	Filter
5	Ripple Filter
6	Input
7	Trigger Pulse Input
8	Pulse Amp. Output
9	V _{cc}



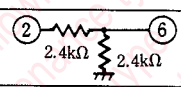
Block Diagram



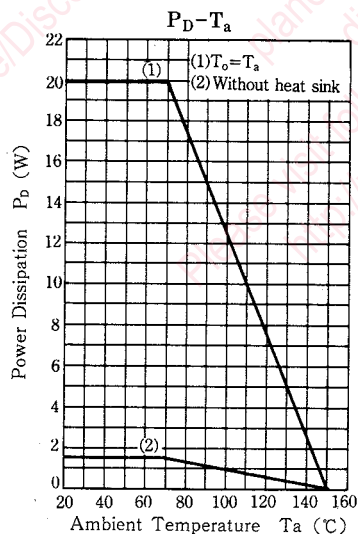
■ Absolute Maximum Ratings (Ta=25°C)

Item	Symbol	Rating		Unit	
Voltage	Supply Voltage	V _{CC}	30		V
	Circuit Voltage	V ₂₋₁	0	60	V
		V ₃₋₁	0	60	V
		V ₇₋₁	-1	3	V
Current	Supply Current	I _{CC}	360		mA
	Circuit Current	I ₂	-1800	1800	mA _{O-P}
		I ₈	-1800	1800	mA _{O-P}
Power Dissipation (Ta=70°C)		P _D	8		W
Temperature	Operating Ambient Temperature	T _{opr}	-20~+70		°C
	Storage Temperature	T _{stg}	-55~+150		°C

■ Electrical Characteristics (Ta=25°C)

Item	Symbol	Test Circuit	Condition	min.	typ.	max.	Unit
Deflection Current	I _{y(p-p)}	1		1700	1800	1900	mA _{p-p}
Deflection Current Linearity	ΔI _{y(+)}	1		59		175	mA _{p-p}
Deflection Current Linearity	ΔI _{y(-)}	1		54		162	mA _{p-p}
Deflection Current Change with Ambient Temperature*	ΔI _y /T _a	1	T _a = -20~+70°C	-1.5		1.5	%
Center Voltage	V _{MID}	1	I _{y(p-p)} = 1.7A	14.0	14.6	15.2	V
Flyback Pulse Amplitude	V _(FBP)	1	I _{y(p-p)} = 1.7A	47			V
Static Circuit Current	I _{CQ}		V ₃₋₁ = 24V V ₉₋₁ = 24V V ₇₋₁ = 0 	8	14	24	mA
Output Tr Saturation Voltage	V ₃₋₂		V ₃₋₁ = V ₉₋₁ = 24V, Pin②-③ = 33Ω V ₆₋₁ = 3V, V ₇₋₁ = 0		3.0	4.0	V
Output Tr Saturation Voltage	V ₂₋₁		V ₃₋₁ = V ₉₋₁ = 24V, Pin②-① = 33Ω V ₆₋₁ = 3V, V ₇₋₁ = 0		1	2.0	V
Q ₂₁ Saturation Voltage	V ₈₋₁		V ₉₋₁ = 24V, Pin⑥-③ = 1.2kΩ V ₇₋₁ = 0, V ₆₋₁ = 6.9V			0.5	V
Thermal Resistance	R _{th(j-c)}					4	°C/W

* Design reference value



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