

AN5531

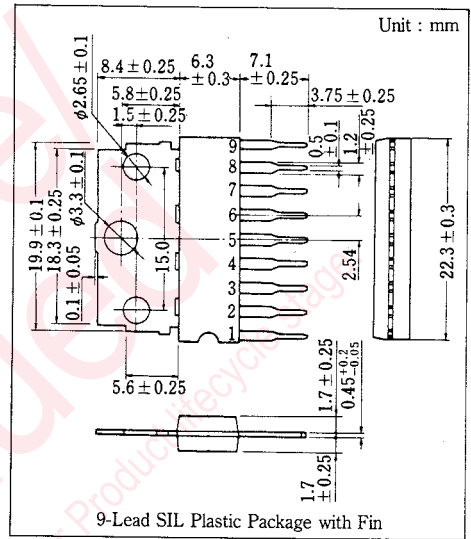
TV Vertical Deflection Output Circuit

Outline

The AN5531 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

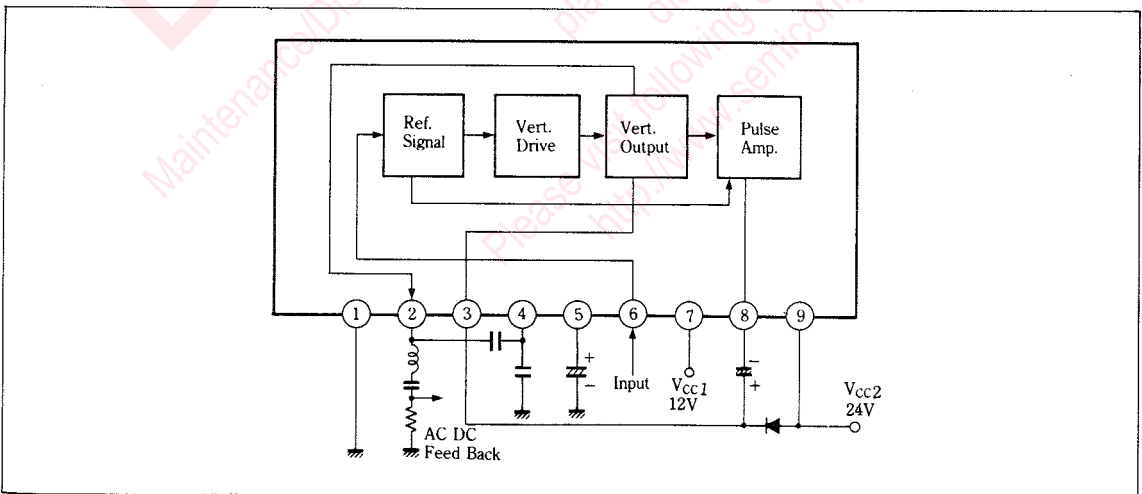
- Low power consumption, direct deflection coil driving capability (Flyback voltage two times as high as supply voltage is supplied during flyback period only)
- Internal comparator
- Supply voltage range : 18~30V



Pin

Pin No.	Pin Name
1	GND
2	Output
3	Supply Voltage for Output
4	Filter
5	Ripple Filter
6	Input
7	V _{CC1}
8	Pulse Amp. Output
9	V _{CC2}

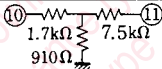
Block Diagram

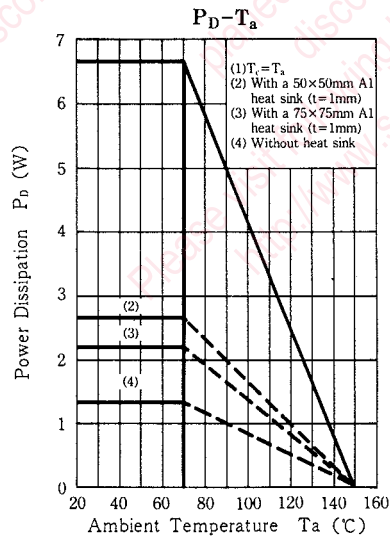


■ Absolute Maximum Ratings (Ta=25°C)

Item	Symbol	Rating		Unit	
Voltage	Supply Voltage	V _{CC1}	14.4		V
		V _{CC2}	30		V
	Circuit Voltage	V ₂₋₁	0	60	V
		V ₃₋₁	0	60	V
		V ₆₋₁	0	V ₇₋₁	V
Current	Supply Current	I _{CC1}	4		mA
		I _{CC2}	360		mA
	Circuit Current	I ₂	-1400	1400	mA _{o-p}
		I	-1400	1400	mA _{o-p}
Power Dissipation	P _D	6.6		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		1300	1400	1500	mA _{p-p}
Center Voltage	V _{MID}	1		13.8	14.4	15.0	V
Flyback Pulse Amplitude	V _(FBP)	1		47			V
Vertical Amp. Distortion	THD	2			0.3	1	%
Static Circuit Current	I _{CQ}		V ₃₋₁ =24V V ₉₋₁ =24V 	8	14	24	mA
Output Tr Saturation Voltage	V ₃₋₂		V ₃₋₁ =V ₉₋₁ =24V, Pin②-①=33Ω V ₆₋₁ =3V, V ₇₋₁ =12V		3	4	V
Output Tr Saturation Voltage	V ₂₋₁		V ₃₋₁ =V ₉₋₁ =24V, Pin②-③=33Ω V ₆₋₁ =9V, V ₇₋₁ =12V		1	2	V
Q ₂₁ Saturation Voltage	V ₈₋₁		V ₃₋₁ =24V, Pin③-④=1.2kΩ V ₆₋₁ =7.2V, V ₇₋₁ =12V			0.5	V
Thermal Resistance	R _{th(j-c)}					12	°C/W



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