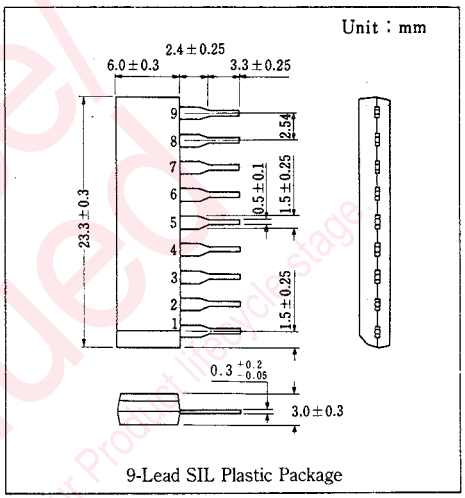
AN6040

Color Encoder for Video for Camera

■ Outline

The AN6040 is an integrated circuit provided with the function which modulates color subcarrier by B-Y and R-Y signals of a video camera color encoder circuit and mixes it.



9-Lead SIL Plastic Package

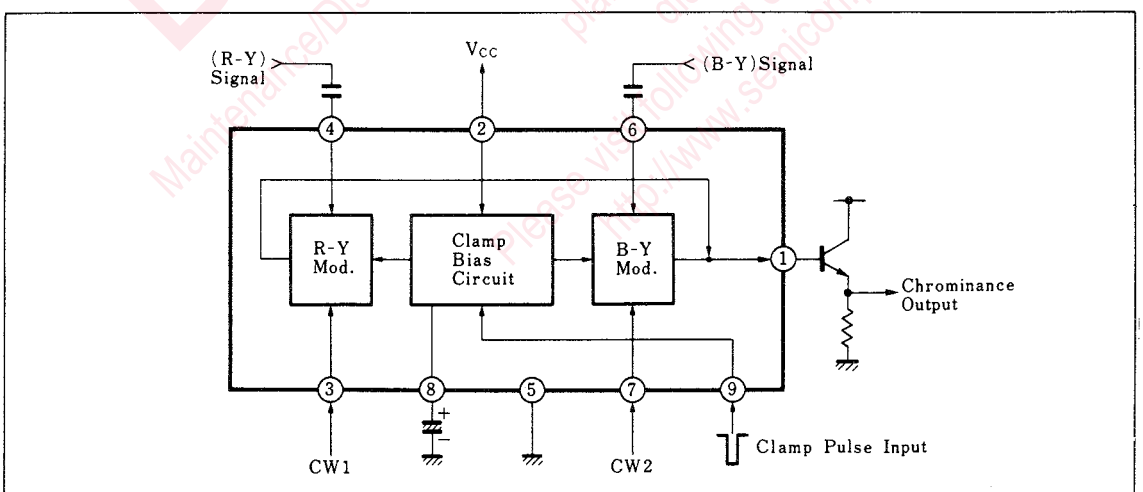
■ Features

- Sub-carrier modulation by B-Y and R-Y signal
- Incorporating clamp circuit
- Outputs mixed B-Y and R-Y modulation signals

■ Pin

Pin No.	Pin Name
1	Chrominance Output
2	Vcc
3	Carrier Input (1)
4	Signal Input (R-Y)
5	GND
6	Signal Input (B-Y)
7	Carrier Input (2)
8	Ref. Voltage
9	Clamp Pulse Input

■ Block Diagram



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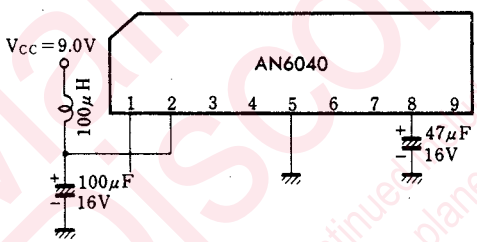
■ Absolute Maximum Ratings (Ta=25°C)

Item		Symbol	Rating	Unit
Supply voltage		V_{CC}	9.5	V
Supply current		I_{CC}	35	mA
Power dissipation		P_D	333	mW
Tem perature	Operating ambient temperature	T_{opr}	−20~+75	°C
	Storage temperature	T_{stg}	−55~+125	°C

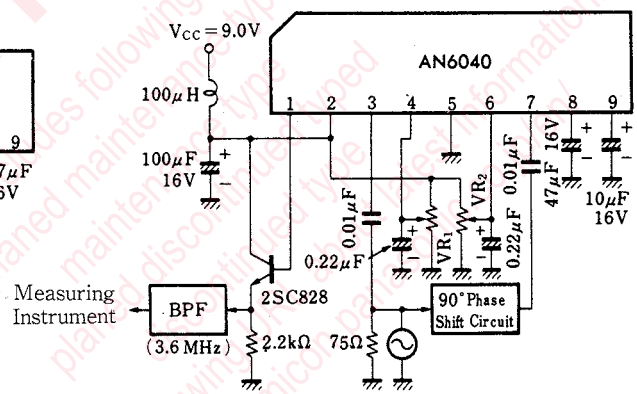
■ Electrical Characteristics (Ta=25°C)

Item	Symbol	Test Circuit	Condition	min.	typ.	max.	Unit
Circuit voltage	V_{1-5}	1	V_{CC}=9.0V	6.2	7.0	7.9	V
	V_{3-5}	1		1.6	2.4	3.0	V
	V_{7-5}	1		1.6	2.4	3.0	V
	V_{8-5}	1		5.2	6.15	6.9	V
	V_{9-5}	1		2.8	3.3	4.2	V
Total circuit current	I_{tot}	1		13	20	32	mA
Carrier leak	CL	2				1.0	mV_{rms}
Output voltage	$V_{O(1)}$	3		695	800	900	mV_{rms}
Output voltage	$V_{O(2)}$	4		695	800	900	mV_{rms}

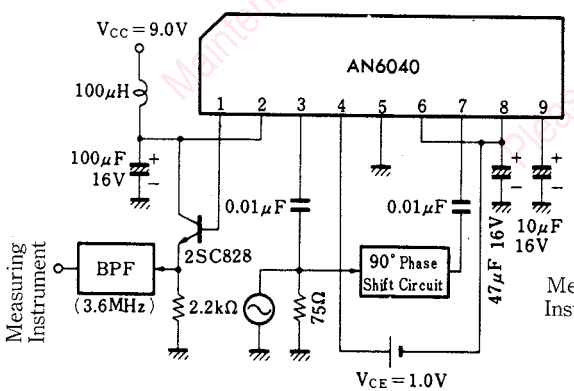
Test Circuit 1 ($V_{1,3,7,8,9-5}$, I_{tot})



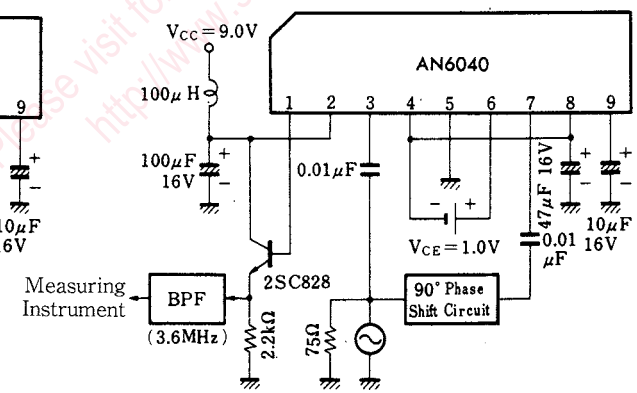
Test Circuit 2 (CL)



Test Circuit 3 ($V_{O(1)}$)



Test Circuit 4 ($V_{O(2)}$)



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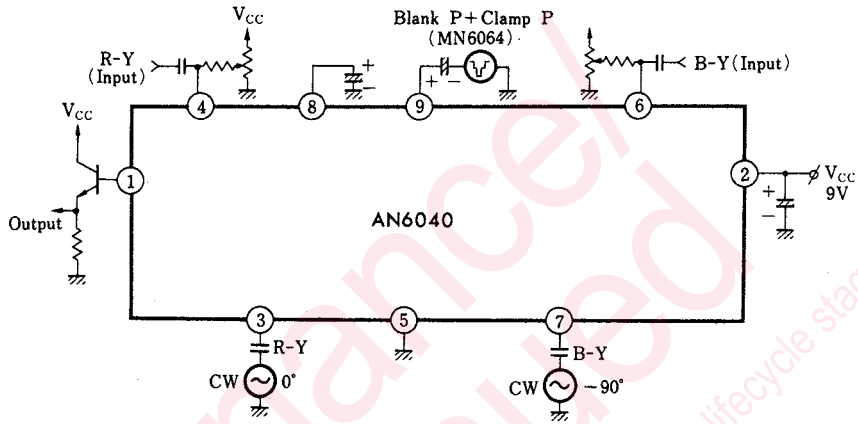
■ Application Circuit



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