

AN6040

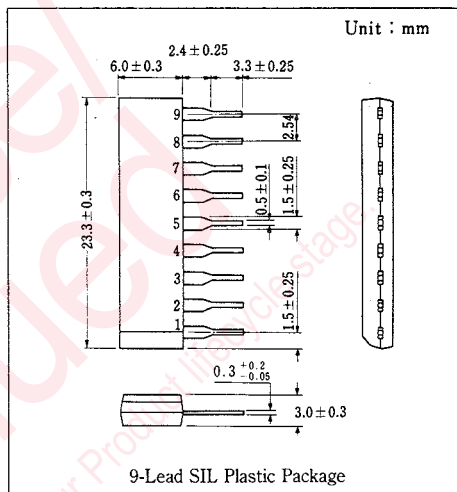
Color Encoder for Video for Camera

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.

Features

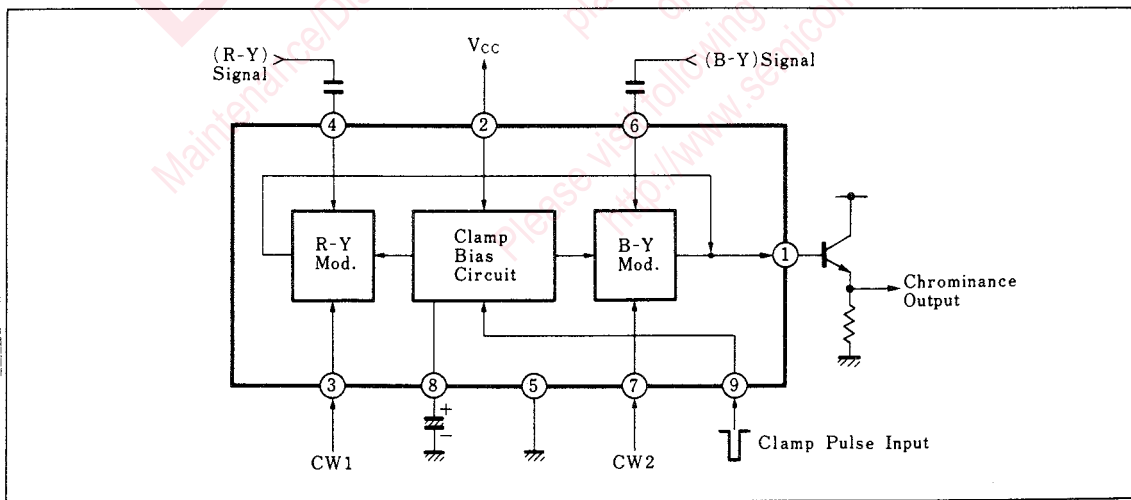
- Sub-carrier modulation by B-Y and R-Y signal
- Incorporating clamp circuit
- Outputs mixed B-Y and R-Y modulation signals



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



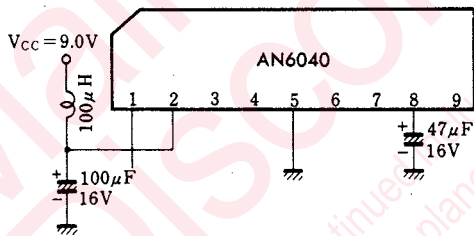
■ Absolute Maximum Ratings (Ta=25°C)

Item	Symbol	Rating	Unit
Supply voltage	V _{CC}	9.5	V
Supply current	I _{CC}	35	mA
Power dissipation	P _D	333	mW
Temperature	Operating ambient temperature	-20 ~ +75	°C
	Storage temperature	-55 ~ +125	°C

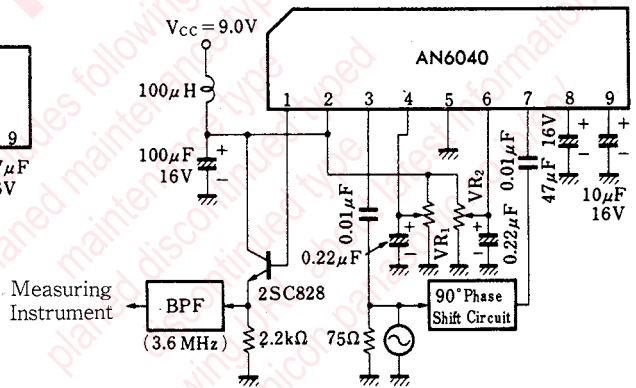
■ Electrical Characteristics (Ta=25°C)

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}

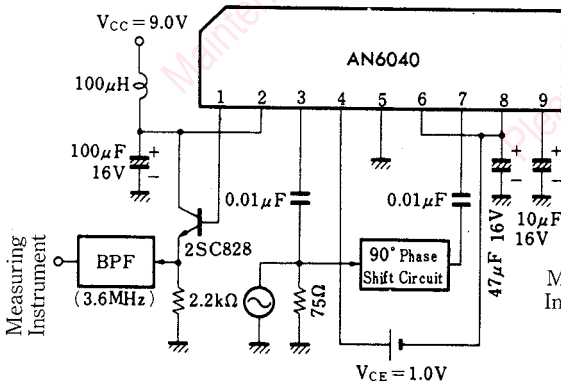
Test Circuit 1 (V₁, 3, 7, 8, 9-5, I_{tot})



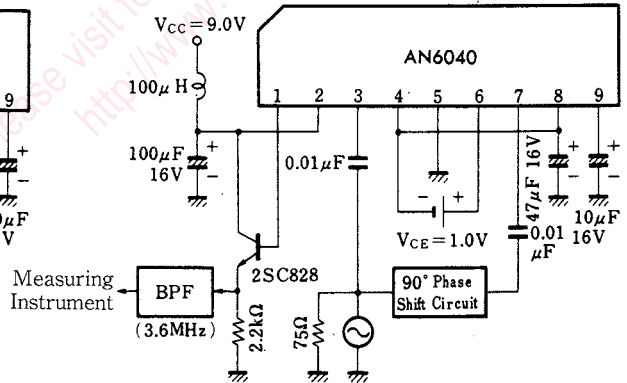
Test Circuit 2 (CL)



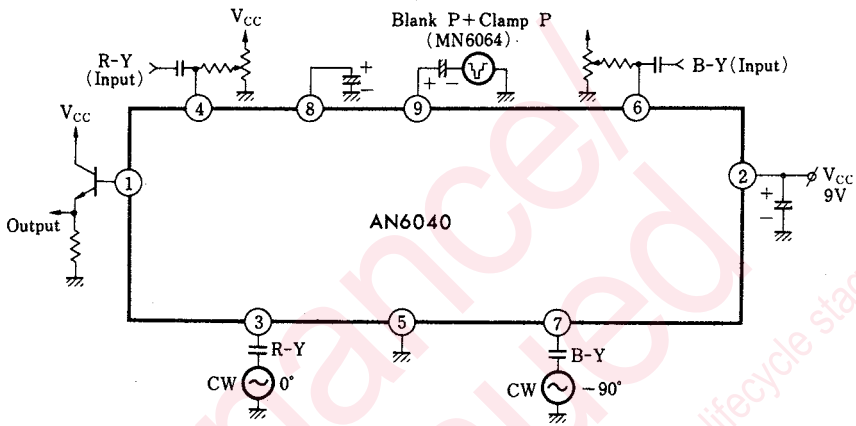
Test Circuit 3 (V_{O(1)})



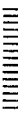
Test Circuit 4 (V_{O(2)})



■ Application Circuit



Maintenance/Discontinued includes following four Product lifecycle stage.
 Discontinued
 planned maintenance type
 maintenance type
 planned discontinued type
 discontinued type
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