

HA118003NT

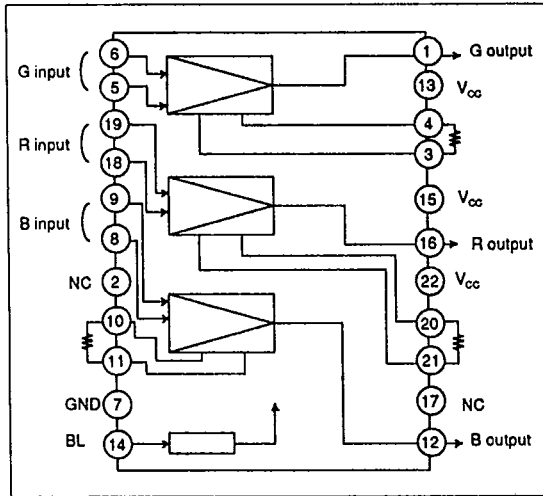
T-77-17

Matrix Amplifier for Video Cameras

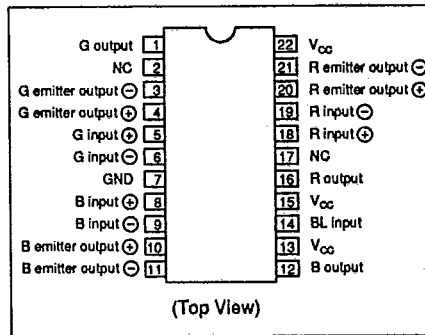
Functions

- Color matrix amplifier
- 3 on-chip channels (R, G, B)
- Blanking function

Block Diagram



Pin Arrangement



Ordering Information

Type No.	Package
HA118003NT	DP-22S

Absolute Maximum Ratings

Item	Symbol	Rating	Unit
Supply Voltage	V_{CC}	7	V
Operating Supply Voltage*1	V_{opr}	-0.25 to 5 + 0.5	V
Power Dissipation	P_T	70	mW
Operating Temperature	T_{opr}	-10 to +75	°C
Storage Temperature	T_{stg}	-55 to +125	°C

Note: *1 Use single supply for V_{CC} pins (pins 13, 15, 22)



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Electrical Characteristics (V_{CC} = 5V, T_a = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition	Applicable Terminal
Supply Current	I _{CC}	4.0	5.5	7.5	mA		13, 15, 22
Input Terminal Supply Current	I _i	0	1.2	6.5	μA		5, 6, 8, 9, 18, 19
Output Terminal Voltage	V _O	0.72	0.99	1.50	V	R _L =5.6kΩ V ₁₄ =5V	1, 12, 16
Output Terminal Voltage Variation	ΔV _O	-50	0	50	mV	R _L =5.6kΩ V ₁₄ =5V↔0V	1, 12, 16
Operating Gain	G _O	17.9	19.2	20.4	dB	R _L =5.6kΩ f=50kHz	1, 12, 16
Non-operating Gain	G _{cut}	-	-	-20	dB	R _L =5.6kΩ f=1MHz, V ₁₄ =0V	1, 12, 16
In-phase Gain	G _{cm}	-	-	-20	dB	R _L =5.6kΩ f=1MHz	1, 12, 16
Bandwidth	f _B	1.0	-	-	MHz	R _L =560Ω f=200kHz basic, V ₁₄ =5V	1, 12, 16
High Potential Input Gain	G _H	17.9	19.2	20.4	dB	R _L =5.6kΩ f=50kHz, V ₁₄ =5V	1, 12, 16
Low Potential Input Gain	G _L	17.9	19.2	20.4	dB	R _L =5.6kΩ f=50kHz, V ₁₄ =5V	1, 12, 16

