

NTE1415 Integrated Circuit Color Compensation Circuit

Absolute Maximum Ratings: ($T_A = +25^\circ\text{C}$ unless otherwise specified)

Supply Voltage (V_{8-21}), V_{CC}	14.4V
Power Dissipation, P_D	700mW
Operating Temperature Range, T_{opr}	-20° to $+70^\circ\text{C}$
Storage Temperature Range, T_{stg}	-20° to $+150^\circ\text{C}$

Electrical Characteristics: ($T_A = +25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Circuit Current	I_8		20	26	33	mA
	I_{17}		5	12	19	mA
Tint Manual Output Level	$V_{9-2(H)}$		10.3	11.0	11.7	V
	$V_{9-2(L)}$		0.6	1.3	2.0	V
Color Manual Output Level	$V_{20-21(H)}$		9.5	10.2	10.9	V
	$V_{20-21(L)}$		0	—	0.3	V
Tint Auto Output Level	$V_{11-21(H)}$	$V_{CC1} = V_{8-21} = 12\text{V}$	9.5	10.2	10.9	V
	$V_{11-21(L)}$		0.4	1.7	2.7	V
Color Auto Output Level	$V_{19-21(H)}$	$V_{CC2} = V_{17-21} = 5.1\text{V}$	10.1	10.9	11.7	V
	$V_{19-21(L)}$		0.4	1.8	3.1	V
VIR Detection Level	V_{VR}		0.23	0.28	0.33	V
Tint Manual Control Sensitivity	S_{TM}		0.83	0.94	1.05	times
Color Manual Control Sensitivity	S_{CM}		0.86	0.97	1.08	times
Tint Auto Control Sensitivity	S_{TA}		40	43	46	dB
Color Auto Control Sensitivity	S_{CA}		41.5	44.5	47.5	dB
Tint Preference Control Sensitivity	S_{TP}		-1.5	-1.3	-1.1	times

Pin Connection Diagram

To Chroma Processor	1	14	Auto Color Switch Input
From Chroma Processor	2	13	From Chroma Processor
Color Track Switch	3	12	V _{CC}
GND	4	11	Auto Color Amp Output
To Chroma Processor	5	10	Color Crystal
To Chroma Processor	6	9	Color Crystal
From Chroma Processor	7	8	22pF Bypass

