ELECTRONICS, INC.
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NTE1473
Integrated Circuit
Color & Video Signal Processor

Absolute Maximum Ratings: (T_A = +25°C unless otherwise specified)

Supply Voltage, V_{CC} 15V
Power Dissipation (T_A = 70°C), P_T 850mW
Operating Temperature Range, T_{opr} . . . . . –15 to +70°C
Storage Temperature Range, T_{stg} . . . . . –55 to +125°C

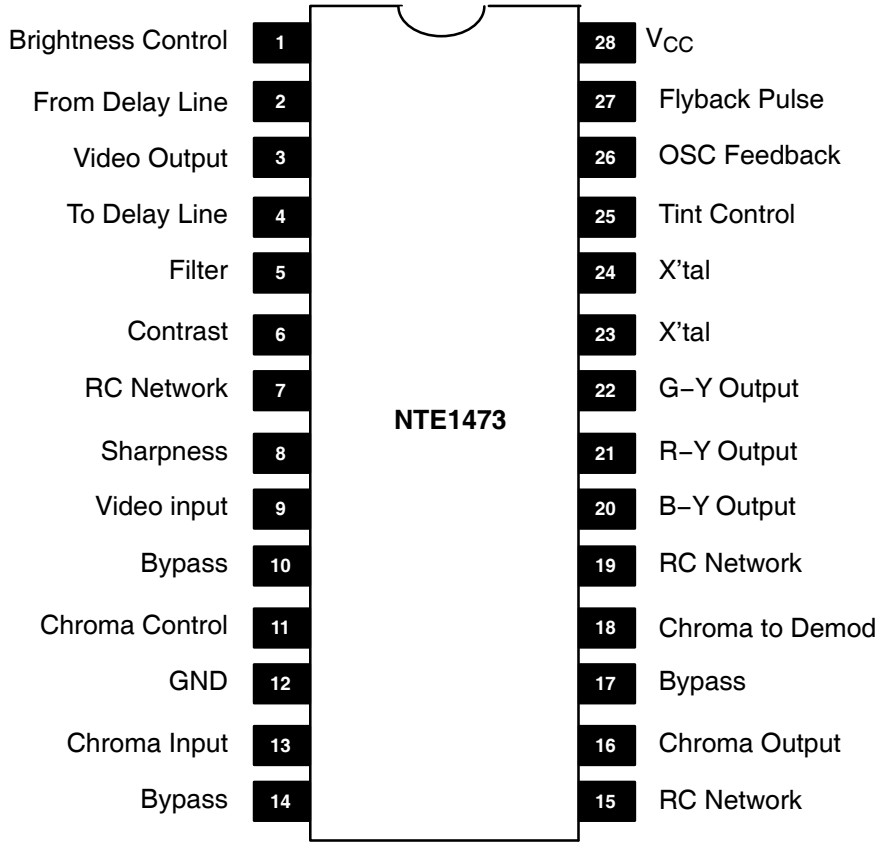
Electrical Characteristics:

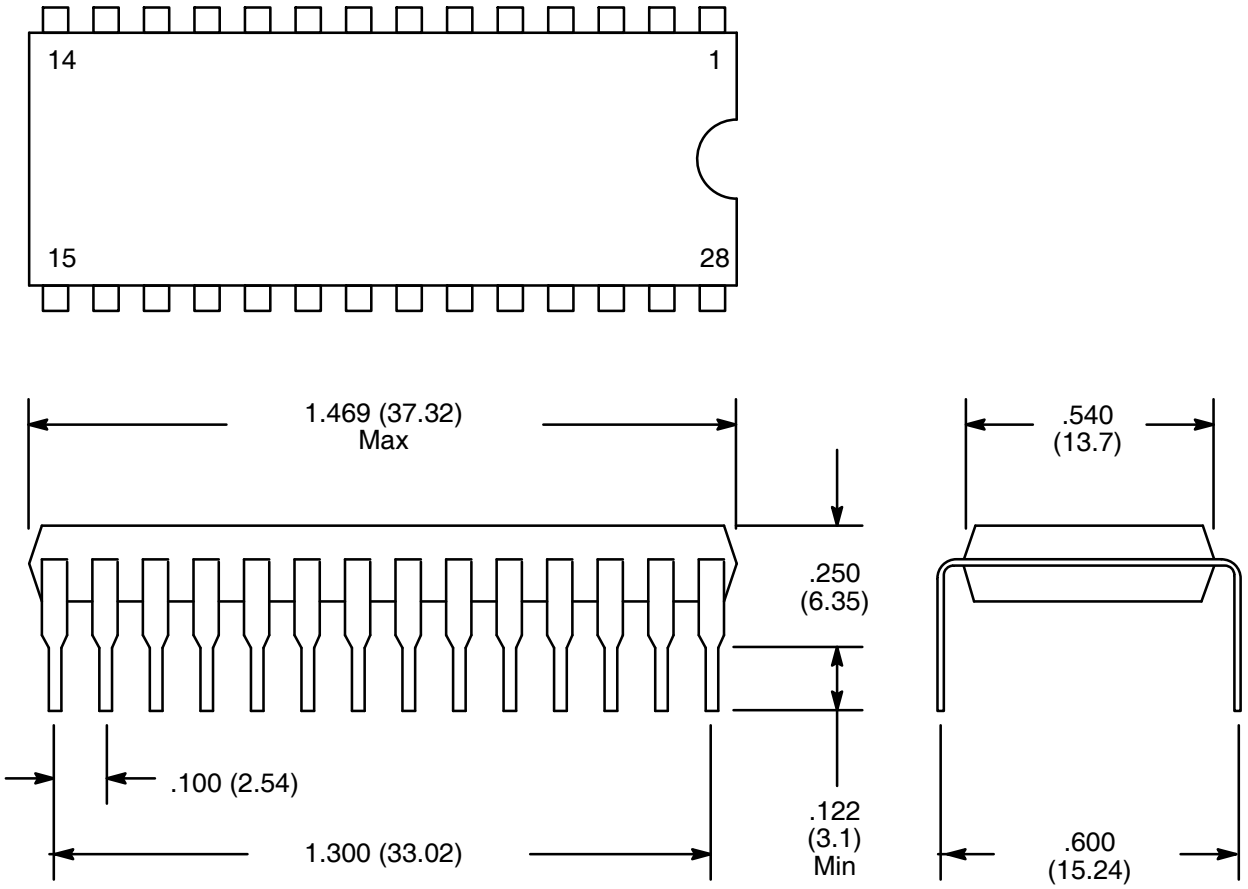
Parameter	Test Conditions	Symbol	Min	Typ	Max	Unit
Supply Current	V_{CC} = 12V	I_{CC}	31	41	59	mA
BPA Chroma Output	Burst: Chroma = 1:1 Burst = 90mV_{p-p}	E_C	0.77	0.96	1.20	V_{p-p}
ACC Range	Burst: Chroma = 1:1, Burst = 13mV_{p-p}	E_a	0.44	0.68	0.95	V_{p-p}
Killer Threshold	Burst: 90mV_{p-p} = 0dB	E_k	–	–43	–	dB
APC Detection Sensitivity		μ	–	16	–	mV/deg
VCO Control Sensitivity		β	–	5	–	Hz/mV
APC Pull in Rnage		f_v	±300	–	–	Hz
Free–Running Frequency	Gate Off	f_o	–250	0	+250	Hz
VCO Output	measured at pin 4	V_4	–	0.9	–	V_{p-p}
C–Demod. Max Output	B–Y $f_{(beat)}$ = 10kHz	E_{bMax}	3.70	5.1	–	V_{p-p}
C–Demod. Conversion Gain	R–Y	G_{r-y}	–	7.8	–	times
C–Demod. Conversion Ratio	B–Y/R–Y	E_{b-y} / E_{r-y}	–	1.28	–	times
	G–Y/R–Y < (R–Y) – < (B–Y) = 105°C	E_{g-y} / E_{r-y}	–	0.40	–	times
C–Demod. Carrier Leakage	3.58MHz BPF	e_{carl}	–	–	0.2	V_{p-p}
C–Demod. Harmonic Leakage	1.2V_{p-p} CW, HPF	e_{car2}	–	–	0.2	V_{p-p}
Color Killer Leakage	Burst: Chroma = 1.1	e_{kl}	–	–	1.25	mV_{rms}

Electrical Characteristics (Cont'd):

Parameter	Test Conditions	Symbol	Min	Typ	Max	Unit
Color Control Leakage	Burst: Chroma = 1.1	e_{cl}	–	–	1.25	mV_{rms}
C–Demod. Output Voltage	VCO	$E_{O(DC)}$	6.4	7.0	7.6	V
C–Demod. Output Differental DC Voltage	VCO (B–Y) – (R–Y) (R–Y) – (G–Y) (G–Y) – (B–Y)	$\Delta E_{O(DC)}$	0.3	0	0.3	V
Video Tone Response	f = 2MHz/f = 100kHz $V_8 = V_{CC}$ $V_8 = 0$	A_{5-1}	–	8.4	–	dB
		A_{5-2}	–	0	–	
Contrast Amp. Gain	$V_{in} = 2V_{p-p}$ $V_6 = V_{CC}$ f = 100kHz, V_8 = GND $V_6 = 0$	A_{5-3}	–	1.03	–	times
		A_{5-4}	–	0.27	–	

Pin Connection Diagram




14
1
15
28
1.469 (37.32)
Max
.250
(6.35)
.100 (2.54)
1.300 (33.02)
.122
(3.1)
Min
.540
(13.7)
.600
(15.24)