

NTE1658 Integrated Circuit Television Tuner Band Selector

Description:

The NTE1658 is an integrated circuit in a 9-Lead SIP type package designed for electronically tuning television sets. This IC is used for producing the VHF channel “L” band power supply/VHF channel “H” band power supply/UHF channel power supply for tuner and the CATV power supply according to the band select signal of 2 inputs.

Functions:

- VHF “L” Band Power Supply Output
- VHF “H” Band Power Supply Output
- UHF Power Supply Output
- CATV Power Supply Output

Features:

- 2 Inputs and 4 Outputs
- Output Low Saturation Voltage: 250mV Typ ($I_O = 60\text{mA}$)

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

Maximum Supply Voltage, $V_{9\text{max}}$	15V
Maximum Load Current	
$I_{1\text{max}}, I_{2\text{max}}$	-60mA
$I_{7\text{max}}, I_{8\text{max}}$	-60mA
Maximum Supply Current (V_{CC2}), $I_{6\text{max}}$	10mA
Input Current, $I_{3\text{max}}, I_{4\text{max}}$	2mA
Allowable Power Dissipation, $P_{d\text{max}}$	200mW
Operating Temperature Range, T_{opr}	-20° to +85°C
Storage Temperature Range, T_{stg}	-55° to +125°C

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Dissipation Current	I_1, I_2, I_7, I_8		-	-	60	mA
Output Saturation Voltage		$V_9 = 12\text{V}, I_6 = 5\text{mA}, I_O = 60\text{mA}$	0	250	700	mV
Input “H” Level Threshold Voltage	V_{TH}		-	-	3.0	V
Input “L” Level Threshold Voltage	V_{TL}		0.8	-	-	V
Output Leakage Current	I_1, I_2, I_7, I_8	$T_A \leq +70^\circ\text{C}$	-	-	50	μA

Note 1. Current flowing into IC: Plus (No Sign)
 Current flowing out of IC: Minus

Truth Table

Input		Output			
Pin3	Pin4	Pin1	Pin2	Pin7	Pin8
L	L	H	Z	Z	Z
H	L	Z	H	Z	Z
L	H	Z	Z	H	Z
H	H	Z	Z	Z	H

Note 2. Z: High Impedance

Input Threshold Voltage: $V_{TL} = 800\text{mV}$, $V_{TH} = 3\text{V}$

Pin Connection Diagram (Front View)

