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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 = 60mA)

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

Maximum Supply Voltage, V_9max 15V
Maximum Load Current
I_1max, I_2max . . . . . –60mA
I_7max, I_8max . . . . . –60mA
Maximum Supply Current (V_{CC2}), I_6max 10mA
Input Current, I_3max, I_4max 2mA
Allowable Power Dissipation, $P_d$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°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 = 12V, I_6 = 5mA, I_O = 60mA	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	$T_A \le +70°C$	–	–	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} = 800mV, V_{TH} = 3V

Pin Connection Diagram
(Front View)