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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 ( $I_O = 60\text{mA}$ )

**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	$\mu\text{A}$

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)

