



## NTE1759 Integrated Circuit PMOS, 26 Command TV Remote Control Receiver

### **Description:**

The NTE1759 is a PMOS integrated circuit in a 16-Lead DIP type package designed for use in decoding the signal received from a transmitter in TV remote control applications. Direct channel selection can be obtained by combining the NTE1759 receiver with the NTE1758 transmitter control IC. When using the NTE1520 as the channel selection IC, a complete remote control system can be obtained.

### **Features:**

- Capable of Receiving 26 Commands:  
Channel 1–20              Channel UP/DOWN  
Volume UP/DOWN            Mute ON/OFF  
Power ON/OFF
- Capable of Controlling 5 Commands Directly:  
Channel UP/DOWN  
Volume UP/DOWN  
Power ON/OFF
- By Combining with the NTE1520, Direct Addressing is Easily Realized
- Capable of Controlling the Volume for 31 Steps

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

Supply Voltage, $V_{DD} - V_{SS}$ .....	-15 to +0.3V
Input Voltage, $V_{IN} - V_{SS}$ .....	- $V_{DD}$ to +0.3V
Output Current $I_{OH}$ CHU, CHD, INI .....	-5.0mA
VOL, POW .....	-10.0mA
Power Dissipation, $P_D$ .....	360mW
Operating Temperature Range, $T_{opr}$ .....	-20° to +75°C
Storage Temperature Range, $T_{stg}$ .....	-40° to +125°C

### **Electrical Characteristics:** ( $T_A = -20^\circ$ to +75°C, $V_{DD} = -9.6$ to +14.4V unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Supply Voltage	$V_{DD}$		-9.6	-12.0	-14.4	V
Supply Current	$I_{DD}$	$T_A = +25^\circ\text{C}$ , $\text{OSCI} = V_{SS}$ , $V_{DD} = -12V$	-4.0	-10.0	-20.0	mA
Input High Voltage	$V_{IH}(1 \sim 5, 13)$		0	-	-1.5	V
Input Low Voltage	$V_{IL}(1 \sim 5, 13)$		-5.0	-	$V_{DD}$	V
Input Pulldown Current	$I_{IL}(1 \sim 5, 13)$	$T_A = +25^\circ\text{C}$ , $V_{IN} = V_{SS}$ , $V_{DD} = -12V$	5.0	-	50	$\mu\text{A}$

**Electrical Characteristics (Cont'd):** ( $T_A = -20^\circ$  to  $+75^\circ\text{C}$ ,  $V_{DD} = -9.6$  to  $+14.4\text{V}$  unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Output High Voltage	$V_{OH}(\text{CHU})$	$I_{OH} = -1.0\text{mA}$	-	-	-2.5	V
Output High Voltage	$V_{OH}(\text{CHD})$	$I_{OH} = -1.0\text{mA}$	-	-	-2.5	V
Output High Voltage	$V_{OH}(\text{INI})$	$I_{OH} = -1.0\text{mA}$	-	-	-2.5	V
Output High Voltage	$V_{OH}(\text{VOL})$	$I_{OH} = -5.0\text{mA}$	-	-	-2.5	V
Output High Voltage	$V_{OH}(\text{POW})$	$I_{OH} = -5.0\text{mA}$	-	-	-2.5	V
Output Low Current	$I_{OL}(1 \sim 5, 13)$	$T_A = +25^\circ\text{C}$ , $V_{OL} = -11.5\text{V}$ , $V_{DD} = -12\text{V}$	0	-	100	$\mu\text{A}$

