

2 BIT BINARY TO 1 OF 4 DECODER/DRIVER

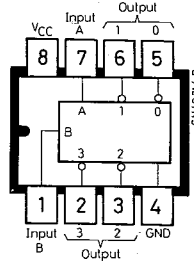
A SERIES SN74N SPECIAL DECODER

**description**

The SN49714P is designed specifically to drive cold-cathode indicator tubes in cases where not more than 4 decimal digits have to be displayed. All data are equivalent to those of the familiar BCD to Decimal decoder/driver SN74141N.

**Truth table**

Input		Output
A	B	turned on
L	L	0
H	L	1
L	H	2
H	H	3



**absolute maximum ratings over operating free-air temperature range (unless otherwise noted)**

Supply voltage,  $V_{CC}$  \_\_\_\_\_ 7 V  
 Input voltage (see note 1) \_\_\_\_\_ 5.5 V  
 Current into any output (off-state) \_\_\_\_\_ 2 mA  
 Operating free-air temperature range \_\_\_\_\_ 0° C to 70° C  
 Storage temperature range \_\_\_\_\_ -65° C to 150° C

**recommended operating conditions**

	MIN	NOM	MAX	UNIT
Supply voltage, $V_{CC}$ (see note 1)	4.75	5	5.25	V
Output voltage (see notes 1 and 2)			65	V
Operating free-air temperature range	0	25	70	°C

- Notes: 1. Voltage values are with respect to network ground terminal.  
 2. This is the maximum voltage which should be applied to any output when it is in the off state.

**electrical characteristics over recommended operating free-air temperature range (unless otherwise noted)**

PARAMETER	TEST CONDITIONS	MIN	TYP <sup>+</sup>	MAX	UNIT
$V_{IH}$ High-level input voltage		2			V
$V_{IL}$ Low-level input voltage				0.8	V
$V_{O(on)}$ On-state output voltage	$V_{CC} = 4.75\text{ V}$ $I_O = 7\text{ mA}$			2.5	V
$V_{O(off)}$ Off-state output voltage	$V_{CC} = 5.25\text{ V}$ $I_O = 0.5\text{ mA}$	60			V
$I_{O(off)}$ Off-state reverse current	$V_{CC} = 5.25\text{ V}$ $V_O = 55\text{ V}$			50	$\mu\text{A}$
$I_{IH}$ High-level input current	$V_{CC} = 5.25\text{ V}$ , $V_I = 5.5\text{ V}$ $V_{CC} = 5.25\text{ V}$ , $V_I = 2.4\text{ V}$			1 80	mA $\mu\text{A}$
$I_{IL}$ Low-level input current	$V_{CC} = 5.25\text{ V}$ $V_I = 0.4\text{ V}$			-3.2	mA
$I_{CC}$ Supply current	$V_{CC} = 5.25\text{ V}$		16	25	mA

<sup>+</sup> This typical value is at  $V_{CC} = 5\text{ V}$ ,  $T_A = 25^\circ\text{C}$