

5-TAP DIGITAL DELAY LINE (Hi-Rel Package)

HY5001

FEATURES

- TTL Schottky buffered input and outputs
- Hermetically sealed metal package
- Low profile 14-pin DIP
- High MTBF
- Customs also available

SPECIFICATIONS

INPUT TEST CONDITIONS:

SUPPLY VOLTAGE (V_{CC}) 5.0 VDC
PULSE VOLTAGE Logic 1 = 3.2 volts
Logic 0 = 0.0 volts

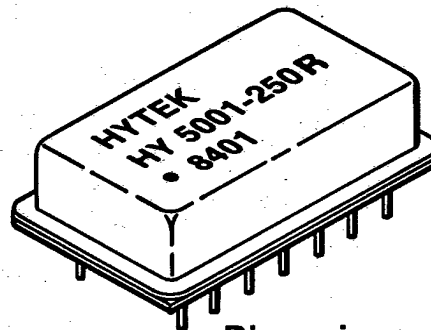
RISE TIME 3.0 nsec.
PULSE WIDTH 2 x total delay
DUTY CYCLE 20%

DRIVE CAPABILITIES:

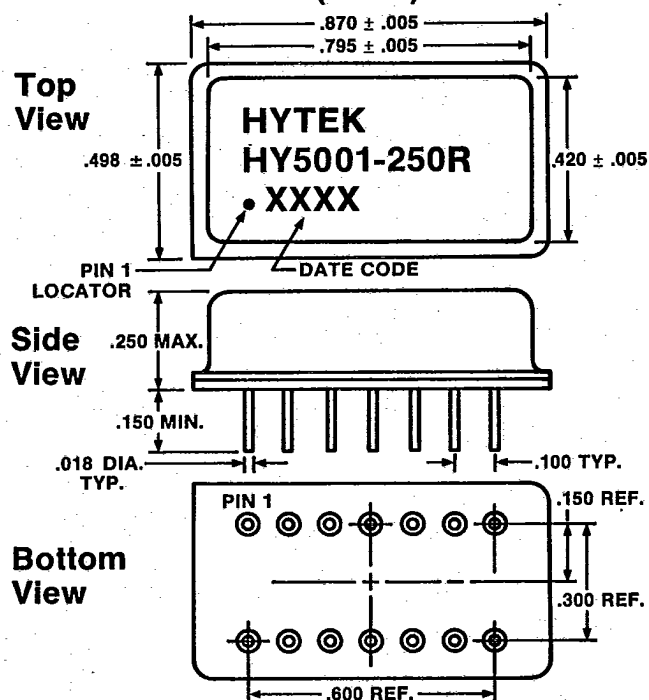
LOGIC 0 10 TTL loads/tap max.
20 TTL loads/unit max.
(20 mA max.)
LOGIC 1 20 TTL loads/tap and unit max.
(~1 mA max.)

OPERATING CHARACTERISTICS:

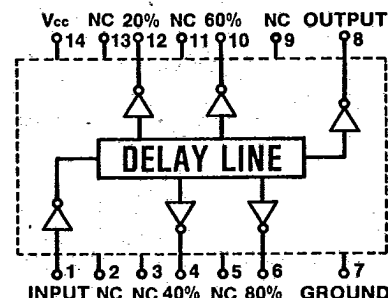
OUTPUT RISE TIME 4 nsec. max. (measured from 0.75V to 2.4V)
DELAY TOLERANCES ± 2 nsec. or $\pm 5\%$ whichever is greater
SUPPLY CURRENT 65 mA max., 45 mA typical
SUPPLY VOLTAGE (V_{CC}) 4.75 to 5.25 VDC
LOGIC 1 INPUT CURRENT 50 μ A @ V_{CC} = 5.25V and V_{IH} = 2.70V
LOGIC 0 INPUT CURRENT -2 mA max. @ V_{CC} = 5.25V and V_{IL} = 0.50V
LOGIC 1 OUTPUT VOLTAGE 2.7V min., 3.4V typical
LOGIC 0 OUTPUT VOLTAGE 0.5V max.
LOGIC 1 INPUT VOLTAGE 2V min. to 5.25V max.
LOGIC 0 INPUT VOLTAGE 0.8V max.
SHORT CIRCUIT OUTPUT CURRENT -40 mA min. to -100 mA max.
V_{CC} = 5.25V, one output shorted for max. 1 sec. duration
OPERATING TEMPERATURE 0°C to 70°C
(optional -55°C to +125°C)
STORAGE TEMPERATURE -55°C to +125°C
HERMETICITY leak rate < 1 X 10⁻⁶ ATM. CC/S



Dimensions
(Inches)



Top View



Specifications Subject to Change Without Notice

DELAY AT EA. TAP IN NSEC.

Part No. †	Tap 1	Tap 2	Tap 3	Tap 4	Output
HY5001-025R	5±2	10±2	15±2	20±2	25±2
HY5001-030R	6±2	12±2	18±2	24±2	30±2
HY5001-035R	7±2	14±2	21±2	28±2	35±2
HY5001-040R	8±2	16±2	24±2	32±2	40±2
HY5001-045R	9±2	18±2	27±2	36±2	45±2.3
HY5001-050R	10±2	20±2	30±2	40±2	50±2.5
HY5001-075R	15±2	30±2	45±2.3	60±3	75±3.8
HY5001-100R	20±2	40±2	60±3	80±4	100±5
HY5001-150R	30±2	60±3	90±4.5	120±6	150±7.5
HY5001-200R	40±2	80±4	120±6	160±8	200±10
HY5001-250R	50±2.5	100±5	150±7.5	200±10	250±12.5
HY5001-500R	100±5	200±10	300±15	400±20	500±25

† Suffix designates:

R = standard 0°C to 70°C operation
M = standard -55°C to +125°C operation
Z = 883 screening

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