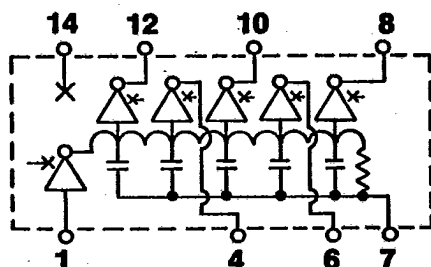


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**DDL-XXXF & LPS-XXX  
ADVANCED SCHOTTKY  
DELAY LINES**



### ADVANCED SCHOTTKY (DDL-XXXF)

#### RECOMMENDED OPERATING CONDITIONS

(Vcc) Supply Voltage ..... 5.00  $\pm$  0.25 VDC  
(Icc) Supply Current ..... 35 ma Typ./40 ma Max.  
(TRIn) Input Rise Time ..... 3 ns.  
(TWin) Input Pulse Width ..... 40% of Delay  
(Ein) Input Pulse Voltage ..... 3.20 VDC  
Operating Temperature ..... 0°C to 70°C  
Storage Temperature ..... -55°C to 125°C

#### ELECTRICAL CHARACTERISTICS

(VIH) High-Level Input Voltage ..... 2.0 to 5.0V  
(IIH) High-Level Input Current ..... 20  $\mu$ A Max.  
(VIL) Low-Level Input Voltage ..... 0.8V Max.  
(IIL) Low-Level Input Current ..... -0.6 ma Max.  
(VOH) High-Level Output Voltage ..... 2.4V Min.  
(VOL) Low-Level Output Voltage ..... 0.4V Max.  
High-Level Output Drives ..... 25 TTL Loads/Unit Max.  
Low-Level Output Drives ..... 12.5 TTL Loads/Tap Max.  
25 TTL Loads/Unit Max.

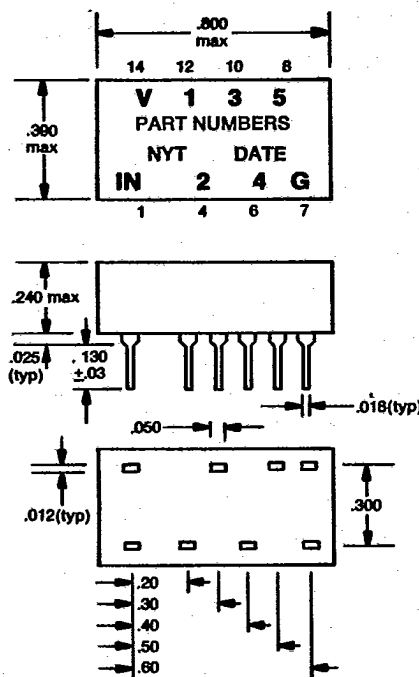
### ADVANCED LOW-POWER SCHOTTKY (LPS-XXX)

#### RECOMMENDED OPERATING CONDITIONS

(Vcc) Supply Voltage ..... 5.00  $\pm$  0.25 VDC  
(Icc) Supply Current ..... 25 ma Typ./30 ma Max.  
(TRIn) Input Rise Time ..... 3 ns.  
(TWin) Input Pulse Width ..... 40% of Delay  
(Ein) Input Pulse Voltage ..... 3.20 VDC  
Operating Temperature ..... 0°C to 70°C  
Storage Temperature ..... -55°C to +125°C

#### ELECTRICAL CHARACTERISTICS

(VIH) High-Level Input Voltage ..... 2.0 to 5.0V  
(IIH) High-Level Input Current ..... 20  $\mu$ A Max.  
(VIL) Low-Level Input Voltage ..... 0.8V Max.  
(IIL) Low-Level Input Current ..... -0.2 ma Max.  
(VOH) High-Level Output Voltage ..... 2.4V Min.  
(VOL) Low-Level Output Voltage ..... 0.4V Max.  
High-Level Output Drives ..... 10 TTL Loads/Unit Max.  
Low-Level Output Drives ..... 5 TTL Loads/Tap Max.  
10 TTL Loads/Unit Max.



#### OUTPUT RISE TIME (0.75v to 2.40v)

DDL-XXXF SERIES = 4.0 ns Max.

LPS-XXX SERIES = 6.0 ns Max.

| PART NUMBER | PART NUMBER | TOTAL DELAY (NS) | TAP DELAY (NS) | INPUT PULSE WIDTH (NS) |
|-------------|-------------|------------------|----------------|------------------------|
| (1)         | (2)         | (1)              | (2)            | MINIMUM                |
| DDL-25F     | LPS-25      | 25               | 5              | 10                     |
| DDL-30F     | LPS-30      | 30               | 6              | 12                     |
| DDL-35F     | LPS-35      | 35               | 7              | 14                     |
| DDL-40F     | LPS-40      | 40               | 8              | 16                     |
| DDL-45F     | LPS-45      | 45               | 9              | 18                     |
| DDL-50F     | LPS-50      | 50               | 10             | 20                     |
| DDL-55F     | LPS-55      | 55               | 11             | 22                     |
| DDL-60F     | LPS-60      | 60               | 12             | 24                     |
| DDL-65F     | LPS-65      | 65               | 13             | 26                     |
| DDL-70F     | LPS-70      | 70               | 14             | 28                     |
| DDL-75F     | LPS-75      | 75               | 15             | 30                     |
| DDL-100F    | LPS-100     | 100              | 20             | 40                     |
| DDL-125F    | LPS-125     | 125              | 25             | 50                     |
| DDL-150F    | LPS-150     | 150              | 30             | 60                     |
| DDL-175F    | LPS-175     | 175              | 35             | 70                     |
| DDL-200F    | LPS-200     | 200              | 40             | 80                     |
| DDL-250F    | LPS-250     | 250              | 50             | 100                    |
| DDL-300F    | LPS-300     | 300              | 60             | 120                    |
| DDL-350F    | LPS-350     | 350              | 70             | 140                    |
| DDL-400F    | LPS-400     | 400              | 80             | 160                    |
| DDL-450F    | LPS-450     | 450              | 90             | 180                    |
| DDL-500F    | LPS-500     | 500              | 100            | 200                    |

(1) Measured at 1.5v level leading edge; Vcc = 5.00 VDC; No loads; at +25°C.  
(2) Nominal delay  $\pm$  2 NS or  $\pm$  5%; whichever is greater; reference to Input.