

8 Pin Mini DIP and Mini DIL 5 Tap TTL Compatible Active Delay Lines EP9458-XXW & EP9458-XXW-LF

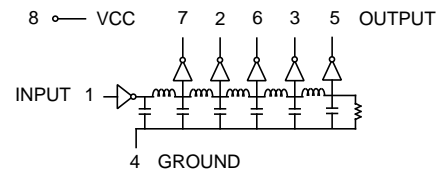
Add "-LF" after part number for Lead-Free

| PCA Part Number | Tap Delays ($\pm 5\%$ or $\pm 2nS$) | Total Delay ($\pm 5\%$ or $\pm 2nS$) | PCA Part Number | Tap Delays ($\pm 5\%$ or $\pm 2nS$) | Total Delay ($\pm 5\%$ or $\pm 2nS$) |
|------------------|---------------------------------------|--|------------------|---------------------------------------|--|
| EP9458-25W(-LF) | 5, 10, 15, 20 | 25 | EP9458-150W(-LF) | 30, 60, 90, 120 | 150 |
| EP9458-30W(-LF) | 6, 12, 18, 24 | 30 | EP9458-175W(-LF) | 35, 70, 105, 140 | 175 |
| EP9458-35W(-LF) | 7, 14, 21, 28 | 35 | EP9458-200W(-LF) | 40, 80, 120, 160 | 200 |
| EP9458-40W(-LF) | 8, 16, 24, 32 | 40 | EP9458-225W(-LF) | 45, 90, 135, 180 | 225 |
| EP9458-45W(-LF) | 9, 18, 27, 36 | 45 | EP9458-250W(-LF) | 50, 100, 150, 200 | 250 |
| EP9458-50W(-LF) | 10, 20, 30, 40 | 50 | EP9458-300W(-LF) | 60, 120, 180, 240 | 300 |
| EP9458-60W(-LF) | 12, 24, 36, 48 | 60 | EP9458-350W(-LF) | 70, 140, 210, 280 | 350 |
| EP9458-75W(-LF) | 15, 30, 45, 60 | 75 | EP9458-400W(-LF) | 80, 160, 240, 320 | 400 |
| EP9458-100W(-LF) | 20, 40, 60, 80 | 100 | EP9458-450W(-LF) | 90, 180, 270, 360 | 450 |
| EP9458-125W(-LF) | 25, 50, 75, 100 | 125 | EP9458-500W(-LF) | 100, 200, 300, 400 | 500 |

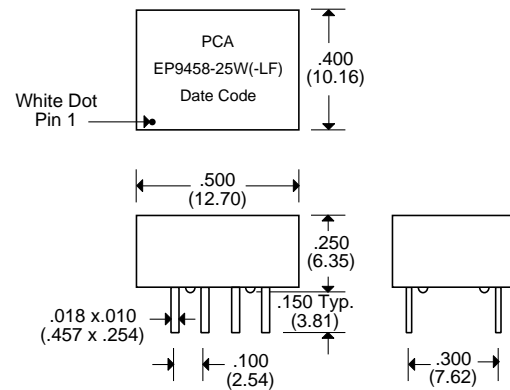
† Whichever is greater. Delay times referenced from input to leading and trailing edges at 25°C, 5.0V, with no load.

| DC Electrical Characteristics | | Test Conditions | Min. | Max. | Unit |
|-------------------------------|------------------------------|---|------|-------------|------|
| Parameter | | | | | |
| V _{OH} | High-Level Output Voltage | V _{CC} = min. V _{IL} = max. I _{OH} = max | 2.7 | | V |
| V _{OL} | Low-Level Output Voltage | V _{CC} = min. V _{IH} = min. I _{OL} = max | | 0.5 | V |
| V _{IK} | Input Clamp Voltage | V _{CC} = min. I _I = I _{IK} | | -1.2 | V |
| I _{IH} | High-Level Input Current | V _{CC} = max. V _{IN} = 2.7V | | 50 | µA |
| | | V _{CC} = max. V _{IN} = 5.25V | | 1.0 | mA |
| I _{IL} | Low-Level Input Current | V _{CC} = max. V _{IN} = 0.5V | | -2 | mA |
| I _{OS} | Short Circuit Output Current | V _{CC} = max. V _{OUT} = 0. | -40 | -100 | mA |
| | | (One output at a time) | | | |
| I _{CCH} | High-Level Supply Current | V _{CC} = max. V _{IN} = OPEN | | 75 | mA |
| I _{CCL} | Low-Level Supply Current | V _{CC} = max. V _{IN} = 0 | | 75 | mA |
| T _{RO} | Output Rise Time | T _d ≤ 500 nS (0.75 to 2.4 Volts) | | 4 | nS |
| N _H | Fanout High-Level Output | V _{CC} = max. V _{OH} = 2.7V | | 20 TTL Load | |
| N _L | Fanout Low-Level Output | V _{CC} = max. V _{OL} = 0.5V | | 10 TTL Load | |

Schematic



Package



| Recommended Operating Conditions | Min. | Max. | Unit | |
|----------------------------------|--------------------------------|------|------|----|
| V _{CC} | Supply Voltage | 4.75 | 5.25 | V |
| V _{IH} | High-Level Input Voltage | 2.0 | | V |
| V _{IL} | Low-Level Input Voltage | | 0.8 | V |
| I _{IK} | Input Clamp Current | | -18 | mA |
| I _{OH} | High-Level Output Current | | -1.0 | mA |
| I _{OL} | Low-Level Output Current | | 20 | mA |
| PW* | Pulse Width of Total Delay | 40 | | % |
| d* | Duty Cycle | | 40 | % |
| T _A | Operating Free-Air Temperature | 0 | +70 | °C |

*These two values are inter-dependent.

| Input Pulse Test Conditions @ 25° C | | Unit | |
|-------------------------------------|---|------|-------|
| E _{IN} | Pulse Input Voltage | 3.2 | Volts |
| PW | Pulse Width % of Total Delay | 110 | % |
| T _{RI} | Pulse Rise Time (0.75 - 2.4 Volts) | 2.0 | nS |
| PRR | Pulse Repetition Rate @ T _d ≤ 200 nS | 1.0 | MHz |
| | Pulse Repetition Rate @ T _d > 200 nS | 100 | KHz |
| V _{CC} | Supply Voltage | 5.0 | Volts |

| Notes : | EP9458W-XX | EP9458-XXW-LF |
|---|-----------------------------|-----------------------------|
| 1. Lead Finish | SnPb | Hot Tin Dip (Sn) |
| 2. Peak Solder Rating (Wave Solder Process) | 260°C 10 (+2/-0) seconds | 260°C 10 (+2/-0) seconds |
| 4. Weight | TBD grams | TBD grams |
| 5. Packaging Information (Tube) | TBD pieces/tube | TBD pieces/tube |

Unless Otherwise Specified Dimensions are in Inches /mm ± .010 / .25