

# SMD Single Output Passive Delay Lines

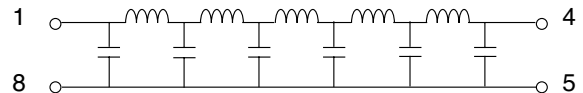
| TIME DELAY<br>nS<br>(Bi-directional) | RISE TIME<br>20-80%<br>nS Max | DCR<br>Ohms<br>Max | IMPEDANCE $\pm 10\%$ |                 |                 |                |
|--------------------------------------|-------------------------------|--------------------|----------------------|-----------------|-----------------|----------------|
|                                      |                               |                    | 55 $\Omega$          | 75 $\Omega$     | 93 $\Omega$     | 100 $\Omega$   |
| 0.5 $\pm$ 0.2                        | 1.5                           | 0.20               | EPA2875G-.5H         | EPA2875G-.5G    | EPA2875G-.5 I   | EPA2875G-.5B   |
| 1 $\pm$ 0.2                          | 1.6                           | 0.20               | EPA2875G-1H          | EPA2875G-1G     | EPA2875G-1 I    | EPA2875G-1B    |
| 2 $\pm$ 0.2                          | 1.6                           | 0.25               | EPA2875G-2H          | EPA2875G-2G     | EPA2875G-2 I    | EPA2875G-2B    |
| 3 $\pm$ 0.2                          | 1.7                           | 0.35               | EPA2875G-3H          | EPA2875G-3G     | EPA2875G-3 I    | EPA2875G-3B    |
| 4 $\pm$ 0.2                          | 1.7                           | 0.45               | EPA2875G-4H          | EPA2875G-4G     | EPA2875G-4 I    | EPA2875G-4B    |
| 5 $\pm$ 0.25                         | 1.8                           | 0.55               | EPA2875G-5H          | EPA2875G-5G     | EPA2875G-5 I    | EPA2875G-5B    |
| 6 $\pm$ 0.3                          | 2.0                           | 0.70               | EPA2875G-6H          | EPA2875G-6G     | EPA2875G-6 I    | EPA2875G-6B    |
| 7 $\pm$ 0.3                          | 2.2                           | 0.80               | EPA2875G-7H          | EPA2875G-7G     | EPA2875G-7 I    | EPA2875G-7B    |
| 8 $\pm$ 0.3                          | 2.4                           | 0.85               | EPA2875G-8H          | EPA2875G-8 G    | EPA2875G-8 I    | EPA2875G-8B    |
| 9 $\pm$ 0.3                          | 2.6                           | 0.90               | EPA2875G-9H          | EPA2875G-9 G    | EPA2875G-9 I    | EPA2875G-9B    |
| 10 $\pm$ 0.3                         | 2.8                           | 0.95               | EPA2875G-10H         | EPA2875G-10G    | EPA2875G-10 I   | EPA2875G-10B   |
| 11 $\pm$ 0.35                        | 3.0                           | 1.00               | EPA2875G-11H         | EPA2875G-11 G   | EPA2875G-11 I   | EPA2875G-11B   |
| 12 $\pm$ 0.35                        | 3.2                           | 1.05               | EPA2875G-12H         | EPA2875G-12 G   | EPA2875G-12 I   | EPA2875G-12B   |
| 13 $\pm$ 0.35                        | 3.4                           | 1.15               | EPA2875G-13H         | EPA2875G-13 G   | EPA2875G-13I    | EPA2875G-13B   |
| 14 $\pm$ 0.35                        | 3.6                           | 1.45               | EPA2875G-14H         | EPA2875G-14 G   | EPA2875G-14 I   | EPA2875G-14B   |
| 15 $\pm$ 0.4                         | 3.8                           | 1.60               | EPA2875G-15H         | EPA2875G-15 G   | EPA2875G-15 I   | EPA2875G-15B   |
| 16 $\pm$ 0.4                         | 4.0                           | 1.75               | EPA2875G-16H         | EPA2875G-16 G   | EPA2875G-16 I   | EPA2875G-16B   |
| 16.5 $\pm$ 0.45                      | 4.1                           | 1.80               | EPA2875G-16.5H       | EPA2875G-16.5 G | EPA2875G-16.5 I | EPA2875G-16.5B |
| 18 $\pm$ 0.45                        | 4.5                           | 1.85               | EPA2875G-18H         | EPA2875G-18 G   | EPA2875G-18 I   | EPA2875G-18B   |
| 19 $\pm$ 0.5                         | 4.8                           | 1.90               | EPA2875G-19H         | EPA2875G-19 G   | EPA2875G-19 I   | EPA2875G-19B   |
| 20 $\pm$ 0.5                         | 5.1                           | 1.95               | EPA2875G-20H         | EPA2875G-20 G   | EPA2875G-20 I   | EPA2875G-20B   |

Note : Other time delays and impedance are available upon request.

| Recommended Operating Conditions |                                | Min | Max | Unit |
|----------------------------------|--------------------------------|-----|-----|------|
| PW*                              | Pulse Width % of Total Delay   | 200 |     | %    |
| D*                               | Duty Cycle                     |     | 40  | %    |
| T <sub>A</sub>                   | Operating Free Air Temperature | 0   | 70  | °C   |

\*These two values are inter-dependent.

## Schematic



| Input Pulse Test Conditions @ 25°C |                                                           |           |
|------------------------------------|-----------------------------------------------------------|-----------|
| V <sub>IN</sub>                    | Pulse Input Voltage                                       | 1.2 Volts |
| PW                                 | Pulse Width % of Total Delay or 5 nS whichever is greater | 300 %     |
| T <sub>RI</sub>                    | Input Rise Time (20-80%)                                  | 2.0 nS    |
| PRR                                | Pulse Repetition Rate                                     | 1.0 MHz   |

| Electrical Characteristics       | Min | Max      | Unit     |
|----------------------------------|-----|----------|----------|
| Distortion                       |     | $\pm 10$ | %        |
| Temperature Coefficient of Delay |     | 100      | PPM/°C   |
| Insulation Resistance @ 100 Vdc  | 1K  |          | Meg Ohms |
| Dielectric Strength              |     | 100      | Vdc      |

## Package Dimensions

