

# AMZ & AMY Series Passive 5-Tap DIP/SMD Delay Modules

- Low Profile 8-Pin Package for Surface Mount Applications
- Low Distortion LC Network
- 5 Equal Delay Taps
- Fast Rise Time --  $BW \approx 0.35 / t_r$
- Standard Impedances: 50 - 75 - 100 - 200  $\Omega$
- Stable Delay vs. Temperature: 100 ppm/ $^{\circ}C$
- Operating Temperature Range -55 $^{\circ}C$  to +125 $^{\circ}C$

Operating Specifications - *Passive Delay Lines*

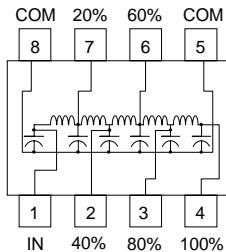
Pulse Overshoot (Pos) ..... 5% to 10%, typical  
 Pulse Distortion (S) ..... 3% typical  
 Working Voltage ..... 25 VDC maximum  
 Dielectric Strength ..... 100VDC minimum  
 Insulation Resistance ..... 1,000 M $\Omega$  min. @ 100VDC  
 Temperature Coefficient ..... 70 ppm/ $^{\circ}C$ , typical  
 Bandwidth ( $f_c$ ) ..... 0.35/ $t_r$  approx.  
 Operating Temperature Range ..... -55 $^{\circ}$  to +125 $^{\circ}C$   
 Storage Temperature Range ..... -65 $^{\circ}$  to +150 $^{\circ}C$

Electrical Specifications at 25 $^{\circ}C$  <sup>1,2,3</sup> Note: For SMD Package add "G" of "J" as below to P/N in Table

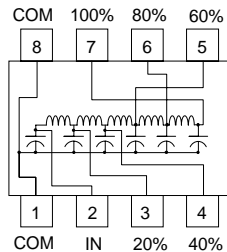
Delay Tolerances		50 Ohm Part Number	Rise Time (ns)	DCR max. (Ohms)	75 Ohm Part Number	Rise Time (ns)	DCR max. (Ohms)	100 Ohm Part Number	Rise Time (ns)	DCR max. (Ohms)	200 Ohm Part Number	Rise Time (ns)	DCR max. (Ohms)
Total (ns)	Tap-to-Tap (ns)												
2.5 $\pm$ 0.3	0.5 $\pm$ 0.2	AMZ-2.55	1.5	0.4	AMZ-2.57	1.5	0.6	AMZ-2.51	1.5	0.6	AMZ-2.52	1.5	0.9
5 $\pm$ 0.5	1.0 $\pm$ 0.3	AMZ-5.55	2.0	0.5	AMZ-5.57	2.0	0.6	AMZ-5.51	2.0	0.6	AMZ-5.52	2.0	1.1
6 $\pm$ 0.5	1.2 $\pm$ 0.4	AMZ-6.55	2.3	0.5	AMZ-6.57	2.3	0.6	AMZ-6.51	2.4	0.7	AMZ-6.52	2.6	1.1
7 $\pm$ 0.5	1.4 $\pm$ 0.4	AMZ-7.55	2.6	0.6	AMZ-7.57	2.6	0.6	AMZ-7.51	2.8	0.8	AMZ-7.52	2.8	1.1
7.5 $\pm$ 0.5	1.5 $\pm$ 0.5	AMZ-7.55	2.8	0.6	AMZ-7.57	2.8	0.8	AMZ-7.51	2.9	0.8	AMZ-7.52	2.9	1.4
8 $\pm$ 0.5	1.6 $\pm$ 0.5	AMZ-8.55	3.0	0.6	AMZ-8.57	3.0	0.9	AMZ-8.51	3.0	0.8	AMZ-8.52	3.1	1.4
9 $\pm$ 0.5	1.8 $\pm$ 0.5	AMZ-9.55	3.3	0.7	AMZ-9.57	3.4	0.9	AMZ-9.51	3.4	0.8	AMZ-9.52	3.4	1.4
10 $\pm$ 1.0	2.0 $\pm$ 0.5	AMZ-10.55	3.4	0.7	AMZ-10.57	3.5	0.9	AMZ-10.51	3.6	0.9	AMZ-10.52	3.6	1.6
15 $\pm$ 1.0	3.0 $\pm$ 0.6	AMZ-15.55	5.2	0.9	AMZ-15.57	5.2	1.7	AMZ-15.51	5.2	1.8	AMZ-15.52	5.2	2.7
20 $\pm$ 1.0	4.0 $\pm$ 1.0	AMZ-20.55	6.8	1.0	AMZ-20.57	6.8	1.9	AMZ-20.51	6.8	2.0	AMZ-20.52	6.8	2.8
25 $\pm$ 1.25	5.0 $\pm$ 1.0	AMZ-25.55	8.5	1.3	AMZ-25.57	8.5	2.1	AMZ-25.51	8.5	2.2	AMZ-25.52	8.5	3.0
30 $\pm$ 1.5	6.0 $\pm$ 1.5	AMZ-30.55	10.2	1.4	AMZ-30.57	10.2	2.2	AMZ-30.51	10.2	2.4	AMZ-30.52	10.2	3.2
35 $\pm$ 1.75	7.0 $\pm$ 1.5	AMZ-35.55	11.9	1.5	AMZ-35.57	11.9	2.4	AMZ-35.51	11.9	2.6	AMZ-35.52	11.9	3.4
40 $\pm$ 2.0	8.0 $\pm$ 1.8	AMZ-40.55	13.6	1.6	AMZ-40.57	13.6	2.7	AMZ-40.51	13.6	2.8	AMZ-40.52	13.6	3.6
50 $\pm$ 2.5	10.0 $\pm$ 2.0	AMZ-50.55	17.0	2.0	AMZ-50.57	17.0	2.9	AMZ-50.51	17.0	3.1	AMZ-50.52	17.0	5.5
60 $\pm$ 3.0	12.0 $\pm$ 2.5	AMZ-60.55	20.4	2.2	AMZ-60.57	20.4	3.3	AMZ-60.51	20.4	3.3	AMZ-60.52	20.4	6.2
75 $\pm$ 3.75	15.0 $\pm$ 3.0	AMZ-75.55	25.5	2.5	AMZ-75.57	25.5	3.6	AMZ-75.51	25.5	3.6	AMZ-75.52	25.5	6.8
80 $\pm$ 4.0	16.0 $\pm$ 3.0	AMZ-80.55	27.2	2.6	AMZ-80.57	27.2	3.4	AMZ-80.51	27.2	5.0	AMZ-80.52	27.2	7.0
100 $\pm$ 5.0	20.0 $\pm$ 3.0	AMZ-100.55	34.0	3.0	AMZ-100.57	34.0	3.7	AMZ-100.51	34.0	5.8	AMZ-100.52	34.0	7.8

1. Rise Times are measured from 10% to 90% points.
2. Delay Times measured at 50% point of leading edge.
3. Output (100% Tap) terminated to ground through  $R_L = Z_0$ .

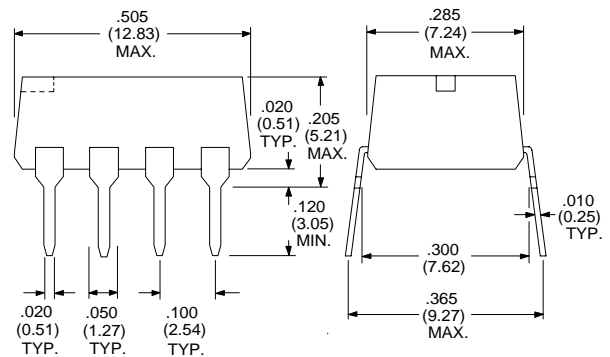
AMZ Style Schematic  
Recommended for New Designs



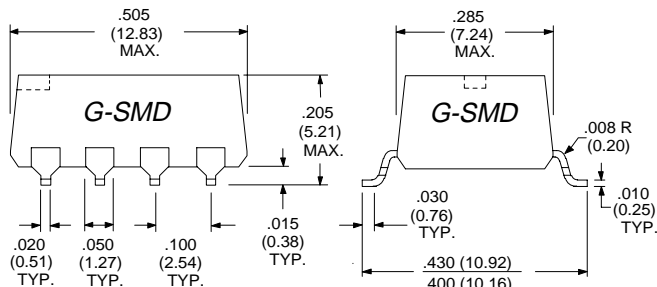
AMY Style Schematic  
Per table, substitute AMY for AMZ in P/N



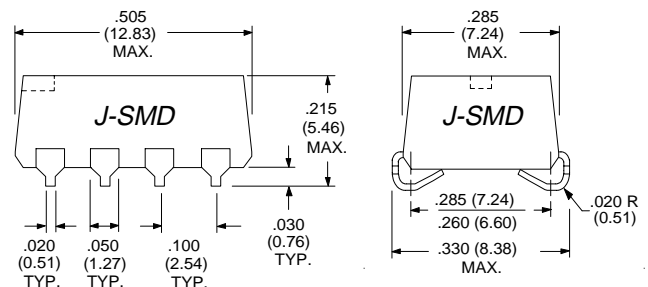
Dimensions in Inches (mm)



To Specify SMD: Add Suffix "G" to P/N



To Specify SMD: Add Suffix "J" to P/N



Specifications subject to change without notice.

For other values & Custom Designs, contact factory.

AMZ 9901