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 Ω*
- *Stable Delay vs. Temperature: 100 ppm/°C*
- *Operating Temperature Range -55°C to +125°C*

Part Number Description **AM X- XXX X X**

8-Pin 5 Tap Delay Line
Pin Out (Z , Y)
Total Delay in nanoseconds (ns)
Line Impedance, Zo (Ohms, ± 5%)
5 = 50 Ω, 7 = 75 Ω, 1 = 100 Ω, 2 = 200 Ω
Lead Style: Blank = Auto-Insertable DIP
G = "Gull Wing" Surface Mount
J = "J" Bend Surface Mount

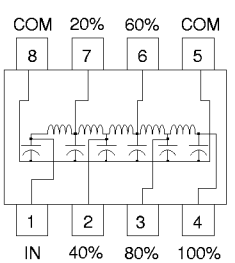
Examples: AMZ-1005 = Z Style 100 ns (20ns per tap) 50 Ω, DIP
AMY-251G = Y Style 25 ns (5ns per tap) 100 Ω, G-SMD

Electrical Specifications at 25°C [1,2,3] (Refer to Operating Specifications for Passive Delays page 2.)

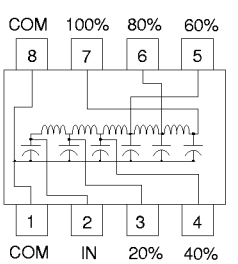
Delay Tolerances Total (ns)	Tap-to-Tap (ns)	50 Ohm Part Number	Rise Time (ns)	DCR max. (Ohms)	75 Ohm Part Number	Rise Time (ns)	DCR max. (Ohms)	100 Ohm Part Number	Rise Time (ns)	DCR max. (Ohms)	200 Ohm Part Number	Rise Time (ns)	DCR max. (Ohms)
2.5 ± 0.3	0.5 ± 0.2	AMZ-2.55	1.5	0.4	AMZ-2.57	1.5	0.6	AMZ-2.51	1.5	0.6	AMZ-2.52	1.5	0.9
5 ± 0.5	1.0 ± 0.3	AMZ-55	2.0	0.5	AMZ-57	2.0	0.6	AMZ-51	2.0	0.6	AMZ-52	2.0	1.1
6 ± 0.5	1.2 ± 0.4	AMZ-65	2.3	0.5	AMZ-67	2.3	0.6	AMZ-61	2.4	0.7	AMZ-62	2.6	1.1
7 ± 0.5	1.4 ± 0.4	AMZ-75	2.6	0.6	AMZ-77	2.6	0.6	AMZ-71	2.8	0.8	AMZ-72	2.8	1.1
7.5 ± 0.5	1.5 ± 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 ± 0.5	1.6 ± 0.5	AMZ-85	3.0	0.6	AMZ-87	3.0	0.9	AMZ-81	3.0	0.8	AMZ-82	3.1	1.4
9 ± 0.5	1.8 ± 0.5	AMZ-95	3.3	0.7	AMZ-97	3.4	0.9	AMZ-91	3.4	0.8	AMZ-92	3.4	1.4
10 ± 1.0	2.0 ± 0.5	AMZ-105	3.4	0.7	AMZ-107	3.5	0.9	AMZ-101	3.6	0.9	AMZ-102	3.6	1.6
15 ± 1.0	3.0 ± 0.6	AMZ-155	5.2	0.9	AMZ-157	5.2	1.7	AMZ-151	5.2	1.8	AMZ-152	5.2	2.7
20 ± 1.0	4.0 ± 1.0	AMZ-205	6.8	1.0	AMZ-207	6.8	1.9	AMZ-201	6.8	2.0	AMZ-202	6.8	2.8
25 ± 1.25	5.0 ± 1.0	AMZ-255	8.5	1.3	AMZ-257	8.5	2.1	AMZ-251	8.5	2.2	AMZ-252	8.5	3.0
30 ± 1.5	6.0 ± 1.5	AMZ-305	10.2	1.4	AMZ-307	10.2	2.2	AMZ-301	10.2	2.4	AMZ-302	10.2	3.2
35 ± 1.75	7.0 ± 1.5	AMZ-355	11.9	1.5	AMZ-357	11.9	2.4	AMZ-351	11.9	2.6	AMZ-352	11.9	3.4
40 ± 2.0	8.0 ± 1.8	AMZ-405	13.6	1.6	AMZ-407	13.6	2.7	AMZ-401	13.6	2.8	AMZ-402	13.6	3.6
50 ± 2.5	10.0 ± 2.0	AMZ-505	17.0	2.0	AMZ-507	17.0	2.9	AMZ-501	17.0	3.1	AMZ-502	17.0	5.5
60 ± 3.0	12.0 ± 2.5	AMZ-605	20.4	2.2	AMZ-607	20.4	3.3	AMZ-601	20.4	3.3	AMZ-602	20.4	6.2
75 ± 3.75	15.0 ± 3.0	AMZ-755	25.5	2.5	AMZ-757	25.5	3.6	AMZ-751	25.5	3.6	AMZ-752	25.5	6.8
80 ± 4.0	16.0 ± 3.0	AMZ-805	27.2	2.6	AMZ-807	27.2	3.4	AMZ-801	27.2	5.0	AMZ-802	27.2	7.0
100 ± 5.0	20.0 ± 3.0	AMZ-1005	34.0	3.0	AMZ-1007	34.0	3.7	AMZ-1001	34.0	5.8	AMZ-1002	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 $R_L=Z_O$

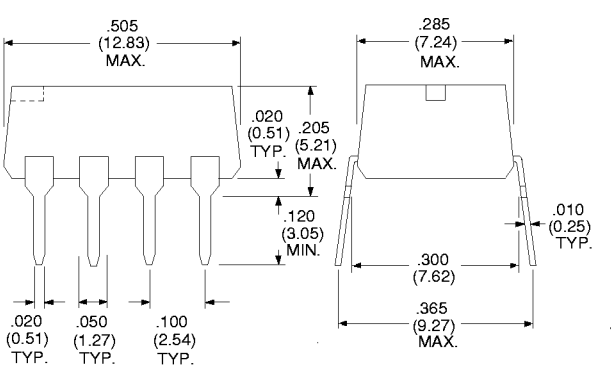
AMZ Style Schematic
Recommended for New Designs



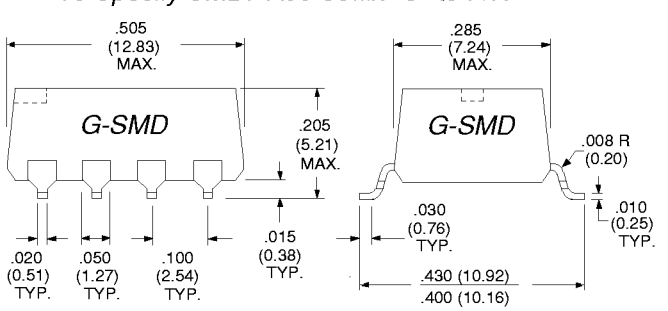
AMY Style Schematic
Per table, substitute AMY for AMZ in P/N



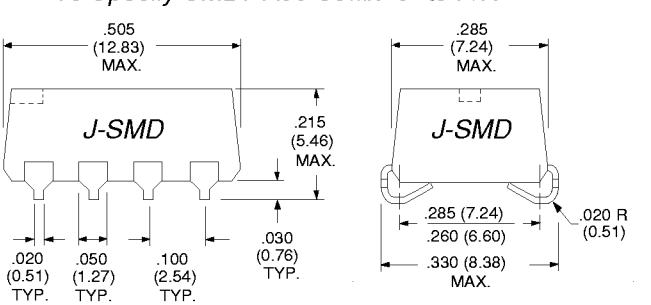
Dimensions in Inches (mm)



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



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



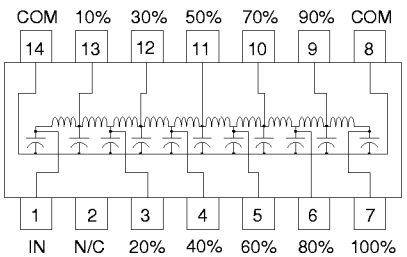
Specifications subject to change without notice. *For other values & Custom Designs, contact factory.* AMZ_IZ 1/98

15801 Chemical Lane, Huntington Beach, CA 92649-1595
Tel: (714) 898-0960 • Fax: (714) 896-0971

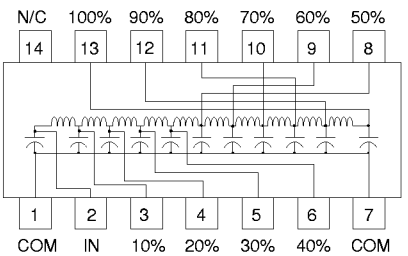
AIZ Series Passive 10-Tap DIP/SMD Delay Modules

- *Low Profile 14-Pin Package for Surface Mount Applications*
- *Low Distortion LC Network*
- *10 Equal Delay Taps*
- *Variety of Schematics Available*
- *Fast Rise Time -- BW $\approx 0.35 / t_r$*
- *Standard Impedances: 50 - 75 - 100 - 200 Ω*
- *Stable Delay vs. Temperature: 100 ppm/°C*
- *Operating Temperature Range -55°C to +125°C*

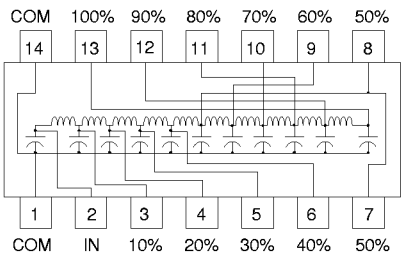
AI**Z** Style Schematic
Most Popular Footprint



AI**Y** Style Schematic
Per table, substitute AIY for AIZ in P/N



AI**U** Style Schematic
Per table, substitute AIU for AIZ in P/N

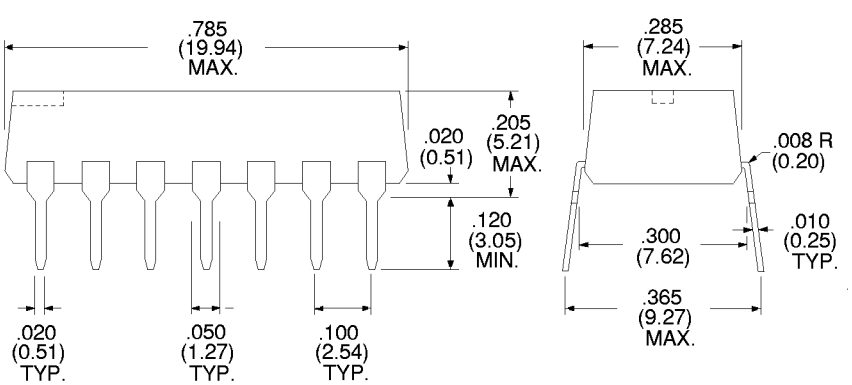


Electrical Specifications at 25°C [1,2,3] (Refer to Operating Specifications for Passive Delays page 2.)

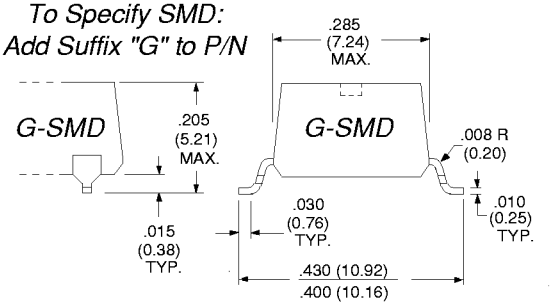
Delay Tolerances Total (ns)	Delay Tolerances Tap-to-Tap (ns)	50 Ohm Part Number	Rise Time (ns)	DCR max. (Ohms)	75 Ohm Part Number	Rise Time (ns)	DCR max. (Ohms)	100 Ohm Part Number	Rise Time (ns)	DCR max. (Ohms)	200 Ohm Part Number	Rise Time (ns)	DCR max. (Ohms)
5.0 ± 0.5	0.5 ± 0.2	AIZ-55	1.5	0.8	AIZ-57	1.5	0.8	AIZ-51	1.5	0.8	AIZ-52	1.5	0.8
7.5 ± 0.5	0.75 ± 0.3	AIZ-7P55	1.8	0.8	AIZ-7P57	1.8	1.1	AIZ-7P51	1.8	0.8	AIZ-7P52	1.8	0.8
10 ± 1.0	1.0 ± 0.4	AIZ-105	2.0	.80	AIZ-107	2.0	1.1	AIZ-101	2.0	1.2	AIZ-102	2.0	1.7
15 ± 1.0	1.5 ± 0.5	AIZ-155	3.0	1.0	AIZ-157	3.0	1.3	AIZ-151	3.0	1.4	AIZ-152	3.0	1.9
20 ± 1.0	2.0 ± 0.5	AIZ-205	4.0	1.2	AIZ-207	4.0	1.5	AIZ-201	4.0	1.6	AIZ-202	4.0	2.4
25 ± 1.25	2.5 ± 0.5	AIZ-255	5.0	1.3	AIZ-257	5.0	1.6	AIZ-251	5.0	1.8	AIZ-252	5.0	3.4
30 ± 1.5	3.0 ± 0.6	AIZ-305	6.0	1.4	AIZ-307	6.0	1.9	AIZ-301	6.0	2.0	AIZ-302	6.0	3.7
35 ± 1.75	3.5 ± 1.0	AIZ-355	7.0	1.5	AIZ-357	7.0	2.6	AIZ-351	7.0	2.9	AIZ-352	7.0	4.0
40 ± 2.0	4.0 ± 1.0	AIZ-405	8.0	1.6	AIZ-407	8.0	2.9	AIZ-401	8.0	3.1	AIZ-402	8.0	4.3
50 ± 2.5	5.0 ± 1.0	AIZ-505	10.0	1.8	AIZ-507	10.0	3.2	AIZ-501	10.0	3.5	AIZ-502	10.0	5.6
60 ± 3.0	6.0 ± 1.5	AIZ-605	12.0	2.0	AIZ-607	12.0	3.5	AIZ-601	12.0	3.8	AIZ-602	12.0	6.1
75 ± 3.75	7.5 ± 1.5	AIZ-755	15.0	2.9	AIZ-757	15.0	4.5	AIZ-751	15.0	4.8	AIZ-752	15.0	6.8
80 ± 4.0	8.0 ± 1.8	AIZ-805	16.0	3.0	AIZ-807	16.0	4.8	AIZ-801	16.0	5.0	AIZ-802	16.0	7.0
100 ± 5.0	10.0 ± 2.0	AIZ-1005	20.0	3.4	AIZ-1007	20.0	4.9	AIZ-1001	20.0	5.6	AIZ-1002	20.0	8.0
120 ± 6.0	12.0 ± 2.5	AIZ-1205	24.0	3.7	AIZ-1207	24.0	5.5	AIZ-1201	24.0	6.0	AIZ-1202	25.0	12.0
125 ± 6.25	12.5 ± 2.5	AIZ-1255	25.0	3.9	AIZ-1257	25.0	5.6	AIZ-1251	25.0	6.3	AIZ-1252	26.0	12.3
150 ± 7.5	15.0 ± 3.0	AIZ-1505	30.0	4.8	AIZ-1507	30.0	6.3	AIZ-1501	30.0	6.8	AIZ-1502	32.0	13.5

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 $R_L=Z_o$

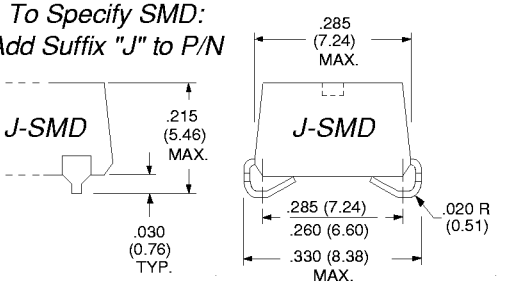
Dimensions in Inches (mm)



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_IZ 4/98

15801 Chemical Lane, Huntington Beach, CA 92649-1595
Tel: (714) 898-0960 • Fax: (714) 896-0971