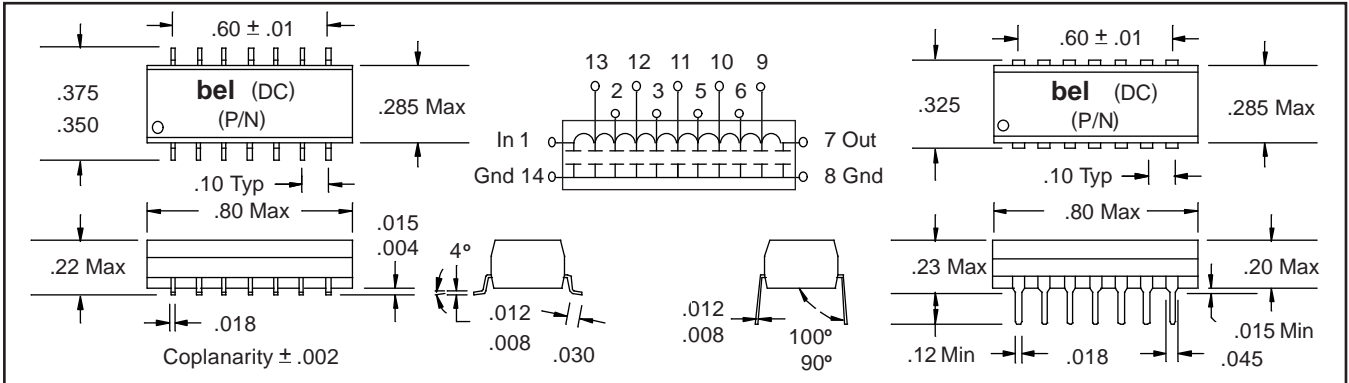


## 10 TAP 14 PIN DIP PASSIVE DELAY MODULES

Cat 20-R4

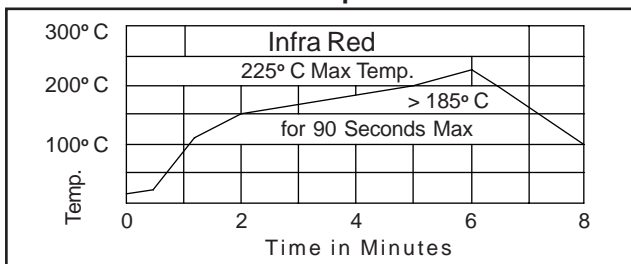


### Part Numbers

SMD	Thru-Hole	Total Delay	Tap - Tap Delay	Rise Time	Attenuation Maximum
S469-0005-XX	A446-0005-XX	5 ± 0.3 ns	0.5 ± 0.3 ns	3.0 ns	5%
S469-0010-XX	A446-0010-XX	10 ± 0.5 ns	1.0 ± 0.4 ns	3.8 ns	5%
S469-0020-XX	A446-0020-XX	20 ± 1.0 ns	2.0 ± 1.0 ns	5.0 ns	5%
S469-0030-XX	A446-0030-XX	30 ± 1.5 ns	3.0 ± 1.0 ns	7.0 ns	5%
S469-0040-XX	A446-0040-XX	40 ± 2.0 ns	4.0 ± 1.0 ns	8.5 ns	5%
S469-0050-XX	A446-0050-XX	50 ± 2.5 ns	5.0 ± 2.0 ns	10.0 ns	5%
S469-0060-XX	A446-0060-XX	60 ± 3.0 ns	6.0 ± 2.0 ns	12.0 ns	8%
S469-0070-XX	A446-0070-XX	70 ± 3.5 ns	7.0 ± 2.0 ns	14.0 ns	8%
S469-0080-XX	A446-0080-XX	80 ± 4.0 ns	8.0 ± 2.0 ns	16.0 ns	8%
S469-0090-XX	A446-0090-XX	90 ± 4.5 ns	9.0 ± 2.0 ns	18.0 ns	8%
S469-0100-XX	A446-0100-XX	100 ± 5.0 ns	10.0 ± 3.0 ns	20.0 ns	10%
S469-0150-XX	A446-0150-XX	150 ± 7.5 ns	15.0 ± 3.0 ns	30.0 ns	10%
S469-0200-XX	A446-0200-XX	200 ± 10.0 ns	20.0 ± 3.0 ns	40.0 ns	10%
S469-0250-XX	A446-0250-XX	250 ± 12.5 ns	25.0 ± 3.0 ns	50.0 ns	10%
S469-0300-XX	A446-0300-XX	300 ± 15.0 ns	30.0 ± 3.0 ns	60.0 ns	10%
S469-0400-XX	A446-0400-XX	400 ± 20.0 ns	40.0 ± 3.0 ns	80.0 ns	10%
S469-0500-XX	A446-0500-XX	500 ± 25.0 ns	50.0 ± 3.0 ns	100.0 ns	10%

Impedance in Ohms ± 10%, XX = 50; 50 Ohms, XX = 01; 100 Ohms, XX = 02; 200 Ohms

### Recommended Temperature Profile



### Notes

Transfer molded for better reliability  
Compatible with ECL & TTL circuits  
Terminals: Electro-Tin plate phosphor bronze  
Performance warranty is limited to specified parameters listed  
Tape & Reel available  
32mm Wide x 16mm Pitch, 500 pieces per 13" reel

### Test Conditions @ 25°C

Ein	Pulse Voltage	1 Volt Typical
Trin	Rise Time	2.0 ns (10%-90%)
PW	Pulse Width	3 x Total Delay
PP	Pulse Period	4 x Pulse Width

### Electrical Characteristics

Delay Measurement	50% Levels
Rise Time Measurement	10%-90% Levels
Distortion	± 10%
Insulation Resistance @ 50 Vdc	10K Megohms Min.
Dielectric Withstanding Voltage	50 Vdc
Operating Temperature Range	-55°C to +125°C
Temperature Coefficient of Delay	100 PPM/°C Max.
Minimum Input Pulse Width	3 x Trout or 5 ns W.I.G.
Maximum Duty Cycle	60%

### Other Delays and Impedances Available Consult Sales

Specifications subject to change without notice.

#### Corporate Office

**Bel Fuse Inc.**  
198 Van Vorst Street, Jersey City, NJ 07302-4496  
Tel: 201-432-0463  
Fax: 201-432-9542  
E-Mail: [Belfuse@compuserve.com](mailto:Belfuse@compuserve.com)  
Internet: <http://www.belfuse.com>

#### Far East Office

**Bel Fuse Ltd.**  
8F/8 Luk Hop Street  
San Po Kong  
Kowloon, Hong Kong  
Tel: 852-2328-5515  
Fax: 852-2352-3706

#### European Office

**Bel Fuse Europe Ltd.**  
Preston Technology Management Centre  
Marsh Lane, Preston PR1 8UD  
Lancashire, U.K.  
Tel: 44-1772-556601  
Fax: 44-1772-888366