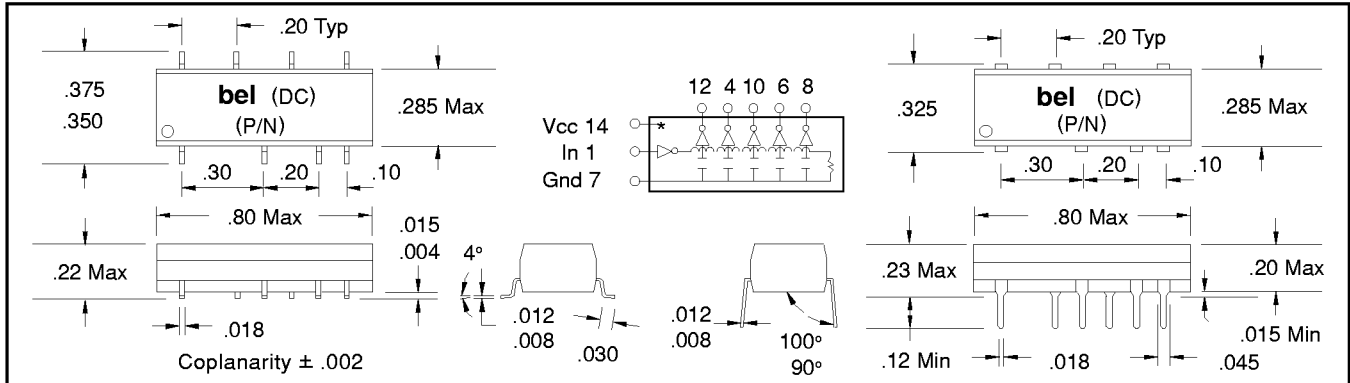




defining a degree of excellence

## 5 TAP LEADING EDGE CONTROL STANDARD DELAY MODULES

Cat 5-R7



### Part Numbers

SMD	Thru-Hole	Total Delay	Delay per Tap	Rise Time
S422-0025-02	A447-0025-02	25 ns	5 ns	3 ns
S422-0030-02	A447-0030-02	30 ns	6 ns	3 ns
S422-0040-02	A447-0040-02	40 ns	8 ns	3 ns
S422-0050-02	A447-0050-02	50 ns	10 ns	3 ns
S422-0060-02	A447-0060-02	60 ns	12 ns	3 ns
S422-0070-02	A447-0070-02	70 ns	14 ns	3 ns
S422-0080-02	A447-0080-02	80 ns	16 ns	3 ns
S422-0090-02	A447-0090-02	90 ns	18 ns	3 ns
S422-0100-02	A447-0100-02	100 ns	20 ns	3 ns
S422-0125-02	A447-0125-02	125 ns	25 ns	3 ns
S422-0150-02	A447-0150-02	150 ns	30 ns	3 ns
S422-0200-02	A447-0200-02	200 ns	40 ns	3 ns
S422-0250-02	A447-0250-02	250 ns	50 ns	3 ns

### Test Conditions @ 25°C

Ein	Pulse Voltage	3.2 Volts
Trin	Rise Time	3.0 ns (10%-90%)
PW	Pulse Width	1.2 x Total Delay
PP	Pulse Period	4 x Pulse Width
Iccl	Supply Current	35 ma Typical
Vcc	Supply Voltage	5.0 Volts

### Electrical Characteristics

	Min.	Max.	Units	
Vcc	Supply Voltage	4.75	5.25	V
Vih	Logic 1 Input Voltage	2.0		V
Vil	Logic 0 Input Voltage		0.8	V
Ioh	Logic 1 Output Current		-1	ma
Iol	Logic 0 Output Current		20	ma
Voh	Logic 1 Output Voltage	2.7		V
Vol	Logic 0 Output voltage		0.5	V
Vik	Input Clamp Voltage		-1.2	V
Iih	Logic 1 Input Current		20	ua
Iil	Logic 0 Input Current		-0.6	ma
Ios	Short Circuit Output Current	-60	-150	ma
Icch	Logic 1 Supply Current		25	ma
Iccl	Logic 0 Supply Current		40	ma
Ta	Operating Free Air Temperature	0°	70°	C
PW	Min. Input Pulse Width of Total Delay	40		%
d	Maximum Duty Cycle		50	%
Tc	Temp. Coeff. of Total Delay (TD)	100 + (25000/TD) PPM/°C		

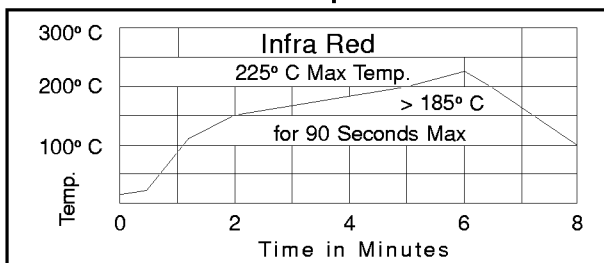
### Tolerances

Input to Taps  $\pm 2$  ns or 5% , Whichever is Greater  
 Tap to Tap  $\pm 2$  ns or 7% , Whichever is Greater  
 Delays measured @ 1.5 V levels on Leading Edge only  
 with no loads on Taps  
 Rise and Fall Times measured from 0.75 V to 2.4 V levels

### Drive Capabilities

Nh	Logic 1 Fanout	-	20 TTL Loads Max.
Nl	Logic 0 Fanout	-	10 TTL Loads Max.

### Recommended Temperature Profile



### Notes

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

### Other Delays and Tolerances 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@belfuse.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