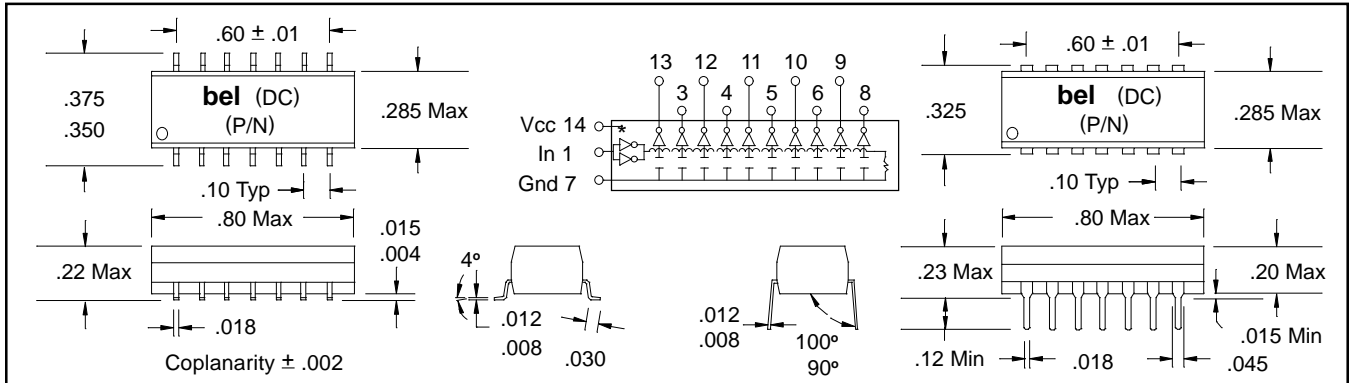


# 10 TAP LEADING EDGE CONTROL STANDARD DELAY MODULES

Cat 11-R5



### Part Numbers

SMD	Thru-Hole	Total Delay	Delay per Tap	Rise Time
S422-0025-10	A447-0025-10	* 22.5 ns	2.5 ± 1 ns	3 ns
S422-0030-10	A447-0030-10	* 27 ns	3 ± 1.5 ns	3 ns
S422-0040-10	A447-0040-10	* 36 ns	4 ± 1.5 ns	3 ns
S422-0050-10	A447-0050-10	50 ns	5 ns	3 ns
S422-0060-10	A447-0060-10	60 ns	6 ns	3 ns
S422-0070-10	A447-0070-10	70 ns	7 ns	3 ns
S422-0080-10	A447-0080-10	80 ns	8 ns	3 ns
S422-0090-10	A447-0090-10	90 ns	9 ns	3 ns
S422-0100-10	A447-0100-10	100 ns	10 ns	3 ns
S422-0125-10	A447-0125-10	125 ns	12.5 ns	3 ns
S422-0150-10	A447-0150-10	150 ns	15 ns	3 ns
S422-0200-10	A447-0200-10	200 ns	20 ns	3 ns
S422-0250-10	A447-0250-10	250 ns	25 ns	3 ns

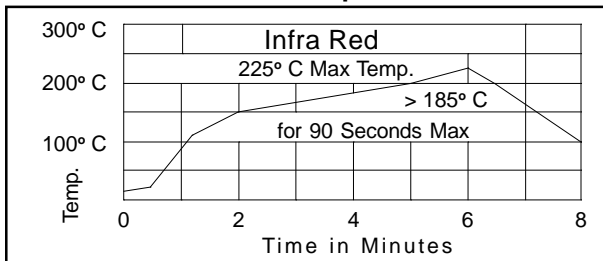
### Tolerances

Input to Taps ± 2 ns or 5% , Whichever is Greater  
 Tap to Tap ± 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  
 \* Ref. Delay from P13, Delay P1-P13 = 4.5 ns typical

### Drive Capabilities

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

### Recommended Temperature Profile



### 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	80 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		40	ua
Iil	Logic 0 Input Current		-1.2	ma
Ios	Short Circuit Output Current	-60	-150	ma
Icch	Logic 1 Supply Current		50	ma
Iccl	Logic 0 Supply Current		90	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		

### 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

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 8F/8 Luk Hop Street  
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 Kowloon, Hong Kong  
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 Fax: 852-2352-3706

#### European Office

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 Preston Technology Management Centre  
 Marsh Lane, Preston PR1 8UD  
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 Tel: 44-1772-556601  
 Fax: 44-1772-888366