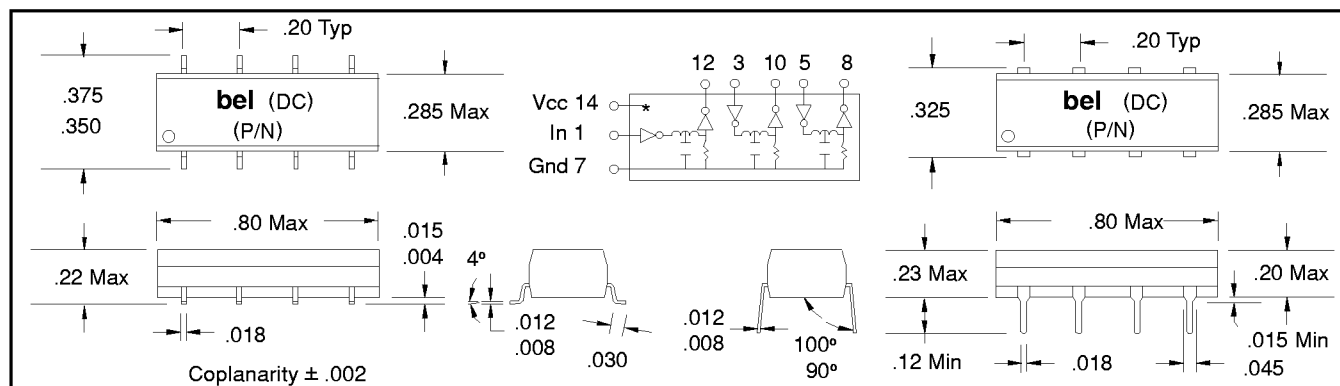




defining a degree of excellence

TRIPLE LINE LEADING EDGE CONTROL STANDARD DELAY MODULES

Cat 12-R3



Part Numbers

SMD	Thru-Hole	Time Delay	Tolerance	Rise Time
S422-0005-A3	A447-0005-A3	5 ns	± 1.0 ns	3 ns
S422-0010-A3	A447-0010-A3	10 ns	± 1.5 ns	3 ns
S422-0015-A3	A447-0015-A3	15 ns	± 1.5 ns	3 ns
S422-0020-A3	A447-0020-A3	20 ns	± 1.5 ns	3 ns
S422-0025-A3	A447-0025-A3	25 ns	± 1.5 ns	3 ns
S422-0030-A3	A447-0030-A3	30 ns	± 1.5 ns	3 ns
S422-0035-A3	A447-0035-A3	35 ns	± 1.5 ns	3 ns
S422-0040-A3	A447-0040-A3	40 ns	± 2.0 ns	3 ns
S422-0045-A3	A447-0045-A3	45 ns	± 2.0 ns	3 ns
S422-0050-A3	A447-0050-A3	50 ns	± 2.5 ns	3 ns
S422-0060-A3	A447-0060-A3	60 ns	± 3.0 ns	4 ns
S422-0070-A3	A447-0070-A3	70 ns	± 3.5 ns	4 ns
S422-0080-A3	A447-0080-A3	80 ns	± 4.0 ns	4 ns

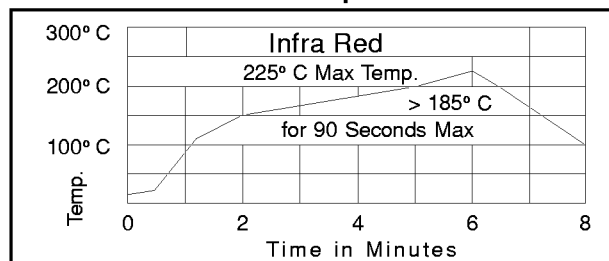
Tolerances

Input to Output ± 5% , Unless otherwise specified
Delays measured @ 1.5 V levels on Leading Edge only
with 15pf loads on Outputs
Rise and Fall Times measured from 0.75 V to 2.4 V levels

Drive Capabilities

Nh	Logic 1 Fanout	-	10 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		20	ua
Iil	Logic 0 Input Current		-0.6	ma
Ios	Short Circuit Output Current	-60	-150	ma
Icch	Logic 1 Supply Current		70	ma
Iccl	Logic 0 Supply Current		90	ma
Ta	Operating Free Air Temperature	0°	70°	C
PW	Min. Input Pulse Width of Total Delay	100		%
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

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