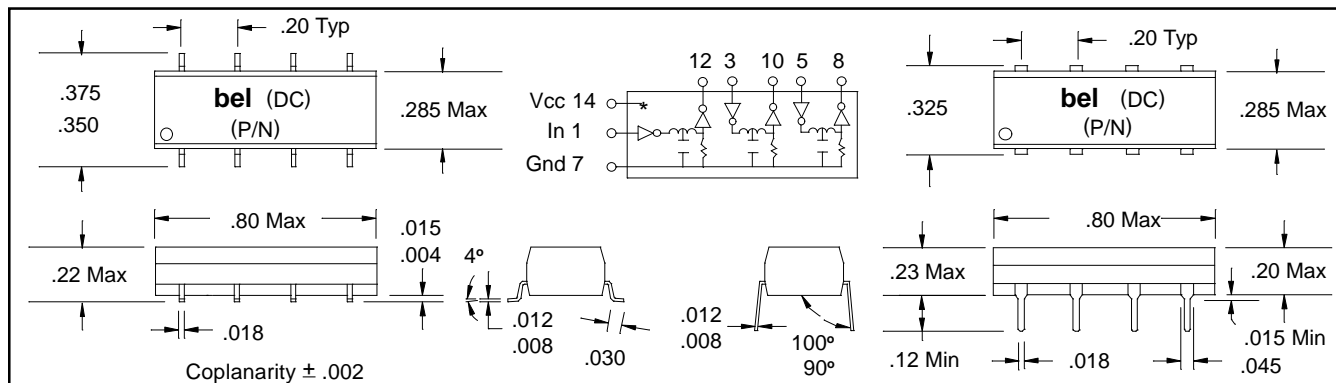


## TRIPLE LINE LEADING EDGE CONTROL LOW VOLTAGE DELAY MODULES

Cat 33-R0



### Part Numbers

SMD	Thru-Hole	Time Delay	Tolerance	Rise Time
S477-0005-A3	A477-0005-A3	5 ns	± 1.0 ns	3 ns
S477-0010-A3	A477-0010-A3	10 ns	± 1.5 ns	3 ns
S477-0015-A3	A477-0015-A3	15 ns	± 1.5 ns	3 ns
S477-0020-A3	A477-0020-A3	20 ns	± 1.5 ns	3 ns
S477-0025-A3	A477-0025-A3	25 ns	± 1.5 ns	3 ns
S477-0030-A3	A477-0030-A3	30 ns	± 2.0 ns	3 ns
S477-0035-A3	A477-0035-A3	35 ns	± 2.0 ns	3 ns
S477-0040-A3	A477-0040-A3	40 ns	± 2.0 ns	4 ns
S477-0045-A3	A477-0045-A3	45 ns	± 2.0 ns	4 ns
S477-0050-A3	A477-0050-A3	50 ns	± 2.5 ns	4 ns
S477-0060-A3	A477-0060-A3	60 ns	± 3.0 ns	4 ns
S477-0070-A3	A477-0070-A3	70 ns	± 3.5 ns	4 ns
S477-0080-A3	A477-0080-A3	80 ns	± 4.0 ns	4 ns

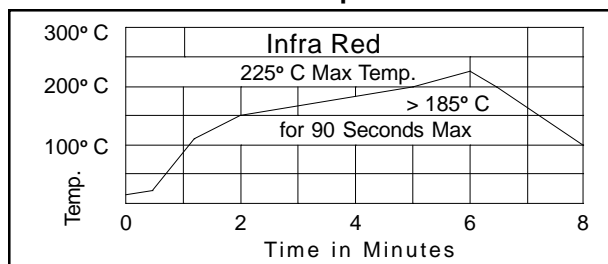
### Tolerances

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 LSTTL Loads Max.
Nl	Logic 0 Fanout	-	10 LSTTL Loads Max.

### Recommended Temperature Profile



### Test Conditions @ 25°C

Ein	Pulse Voltage	3.0 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	3.3 Volts

### Electrical Characteristics

	Min.	Max.	Units
Vcc	3.0	3.6	V
Vih	2.4		V
Vil		0.8	V
Iik		-20	ma
Ioh		20	ma
Iol		-20	ma
Voh	2.9		V
Vol		0.1	V
Vik		-0.5	V
Iih		1	ua
Iil		-1	ua
Icch		10	ma
Iccl		40	ma
Ta	0°	70°	C
PW	100		%
d		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