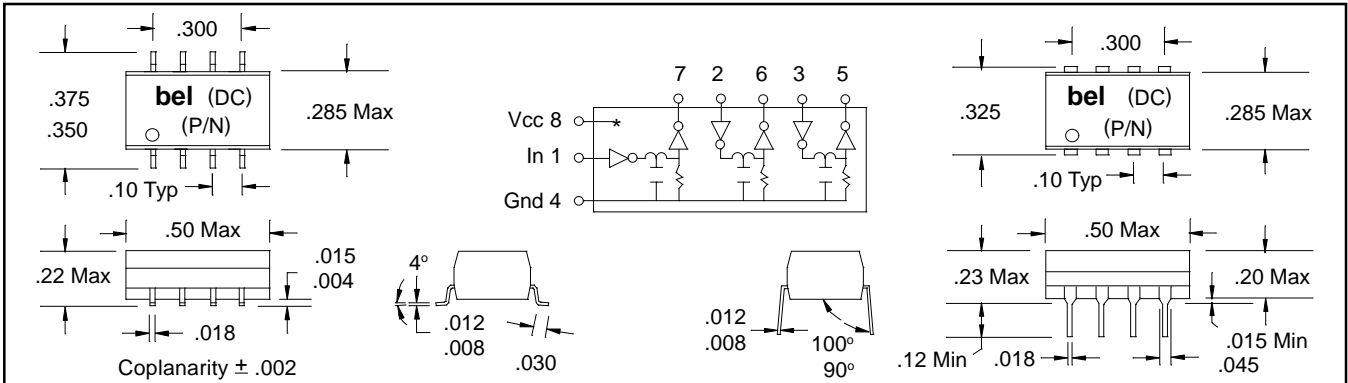


# TRIPLE LINE LEADING EDGE CONTROL PRECISE DELAY MODULES

Cat 39-R0



### Part Numbers

SMD	Thru-Hole	Time Delay	Tolerance	Rise Time
S493-0005-A3	A493-0005-A3	5 ns	± 1.0 ns	3 ns
S493-0007-A3	A493-0007-A3	7 ns	± 1.0 ns	3 ns
S493-0010-A3	A493-0010-A3	10 ns	± 1.0 ns	3 ns
S493-0012-A3	A493-0012-A3	12 ns	± 1.0 ns	3 ns
S493-0015-A3	A493-0015-A3	15 ns	± 1.0 ns	3 ns
S493-0017-A3	A493-0017-A3	17 ns	± 1.0 ns	3 ns
S493-0020-A3	A493-0020-A3	20 ns	± 1.0 ns	3 ns
S493-0025-A3	A493-0025-A3	25 ns	± 1.0 ns	3 ns
S493-0030-A3	A493-0030-A3	30 ns	± 1.0 ns	3 ns
S493-0035-A3	A493-0035-A3	35 ns	± 1.1 ns	3 ns
S493-0040-A3	A493-0040-A3	40 ns	± 1.2 ns	3 ns
S493-0045-A3	A493-0045-A3	45 ns	± 1.4 ns	3 ns
S493-0050-A3	A493-0050-A3	50 ns	± 1.5 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	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

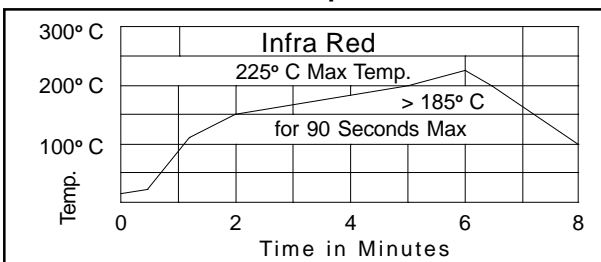
### Tolerances

Input to Output ± 1 ns or 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



### 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:  
24mm Wide x 12mm Pitch, 750 pieces per 13" reel

### Other Delays and Tolerances Available Consult Sales

Specifications subject to change without notice.

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