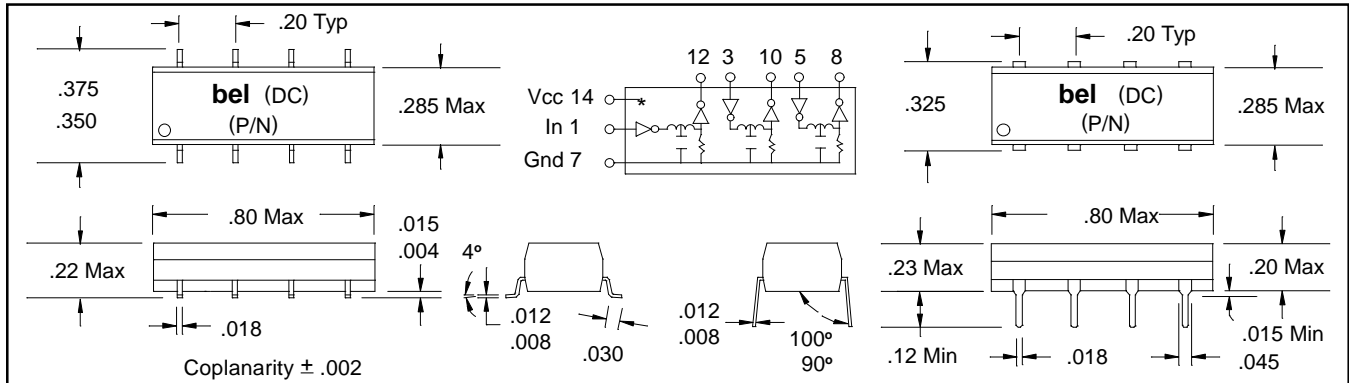


# TRIPLE LINE LEADING EDGE CONTROL LOW VOLTAGE DELAY MODULES

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

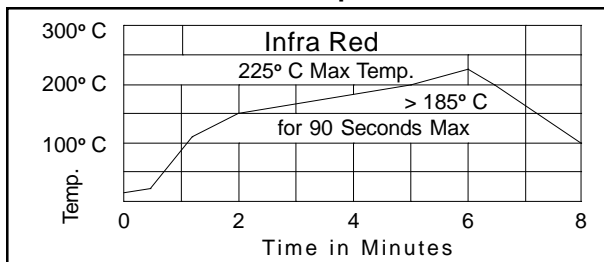
### Tolerances

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	Supply Voltage	3.0	3.6	V
Vih	Logic 1 Input Voltage	2.4		V
Vil	Logic 0 Input Voltage		0.8	V
Iik	Input Clamp Current		-20	ma
Ioh	Logic 1 Output Current		20	ma
Iol	Logic 0 Output Current		-20	ma
Voh	Logic 1 Output Voltage	2.9		V
Vol	Logic 0 Output voltage		0.1	V
Vik	Input Clamp Voltage		-0.5	V
Iih	Logic 1 Input Current		1	ua
Iil	Logic 0 Input Current		-1	ua
Icch	Logic 1 Supply Current		10	ma
Iccl	Logic 0 Supply Current		40	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

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