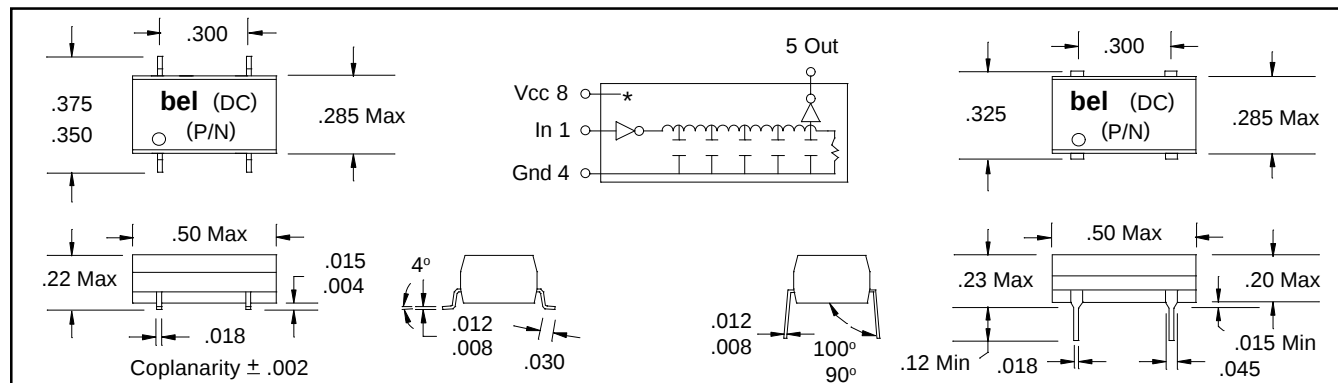




defining a degree of excellence

1 TAP LEADING EDGE CONTROL PRECISE DELAY MODULES

Cat 29-R1



Part Numbers

SMD	Thru-Hole	Time Delay	Tolerance	Rise Time
S493-0005-06	A493-0005-06	5 ns	± 1.0 ns	3 ns
S493-0007-06	A493-0007-06	7 ns	± 1.0 ns	3 ns
S493-0010-06	A493-0010-06	10 ns	± 1.0 ns	3 ns
S493-0015-06	A493-0015-06	15 ns	± 1.0 ns	3 ns
S493-0020-06	A493-0020-06	20 ns	± 1.0 ns	3 ns
S493-0025-06	A493-0025-06	25 ns	± 1.0 ns	3 ns
S493-0030-06	A493-0030-06	30 ns	± 1.0 ns	3 ns
S493-0035-06	A493-0035-06	35 ns	± 1.1 ns	3 ns
S493-0040-06	A493-0040-06	40 ns	± 1.2 ns	3 ns
S493-0045-06	A493-0045-06	45 ns	± 1.4 ns	3 ns
S493-0050-06	A493-0050-06	50 ns	± 1.5 ns	3 ns
S493-0075-06	A493-0075-06	75 ns	± 2.3 ns	3 ns
S493-0100-06	A493-0100-06	100 ns	± 3.0 ns	3 ns

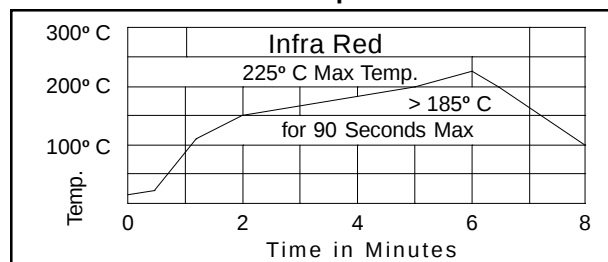
Tolerances

Input to Output ± 1 ns or 3% , Whichever is Greater
Delays measured @ 1.5 V levels on Leading Edge only
with no loads on Output
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	35 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		25	ma
Iccl	Logic 0 Supply Current		40	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:
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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