

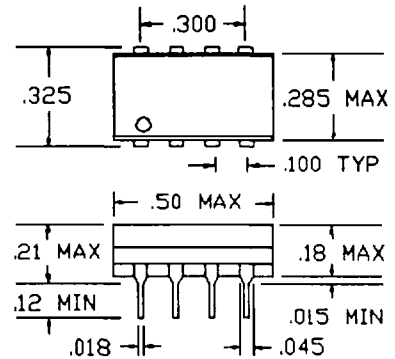
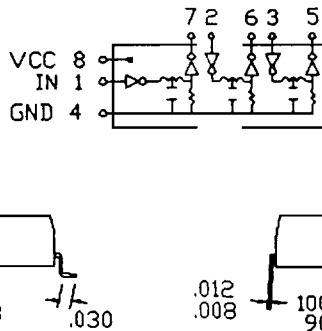
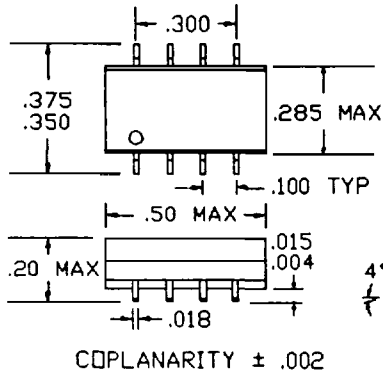
bel / defining a degree of excellence

**FAST**

**LOGIC DELAY MODULES**  
TRIPLE OUTPUT LEADING EDGE CONTROL

**S423 SERIES**

**A463 SERIES**

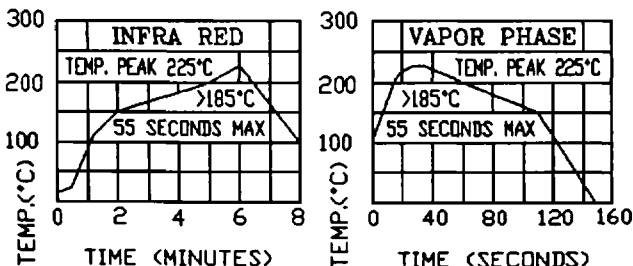


SMD PART NUMBER	THRU-HOLE PART NUMBER	TOTAL DELAY	TOL.	RISE TIME
S423-0004-A3	A463-0004-A3	4 NS	± 1.0 NS	3 NS
S423-0005-A3	A463-0005-A3	5 NS	± 1.0 NS	3 NS
S423-0006-A3	A463-0006-A3	6 NS	± 1.0 NS	3 NS
S423-0007-A3	A463-0007-A3	7 NS	± 1.0 NS	3 NS
S423-0008-A3	A463-0008-A3	8 NS	± 1.0 NS	3 NS
S423-0009-A3	A463-0009-A3	9 NS	± 1.0 NS	3 NS
S423-0010-A3	A463-0010-A3	10 NS	± 1.5 NS	3 NS
S423-0011-A3	A463-0011-A3	11 NS	± 1.5 NS	3 NS
S423-0012-A3	A463-0012-A3	12 NS	± 1.5 NS	3 NS
S423-0013-A3	A463-0013-A3	13 NS	± 1.5 NS	3 NS
S423-0015-A3	A463-0015-A3	15 NS	± 1.5 NS	3 NS
S423-0020-A3	A463-0020-A3	20 NS	± 1.5 NS	3 NS
S423-0025-A3	A463-0025-A3	25 NS	± 1.5 NS	3 NS
S423-0030-A3	A463-0030-A3	30 NS	± 2.0 NS	3 NS
S423-0035-A3	A463-0035-A3	35 NS	± 2.0 NS	3 NS
S423-0040-A3	A463-0040-A3	40 NS	± 2.0 NS	3 NS
S423-0045-A3	A463-0045-A3	45 NS	± 2.0 NS	3 NS
S423-0050-A3	A463-0050-A3	50 NS	± 2.5 NS	3 NS

DELAYS MEASURED AT 1.5 V LEVELS ON LEADING EDGE WITH 1 STTL (15pF) LOAD ON EACH OUTPUT  
RISE TIMES MEASURED FROM 0.75 V TO 2.4 V LEVELS

OTHER DELAYS AND TOLERANCES UPON REQUEST

**SMD SOLDERING TEMPERATURE PROFILES**



**TEST CONDITIONS**

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
Ta	AMBIENT TEMPERATURE	25°C

**ELECTRICAL CHARACTERISTICS**

	MIN	MAX	UNIT
Vcc	4.75	5.25	V
Vih	2.0		V
Vil		0.8	V
Iik		-18	mA
Ioh		-1	mA
Iol		20	mA
Voh	2.7		V
Vol		0.5	V
Vik		-1.2	V
Iih		20	uA
Iil		-0.6	mA
Ios	-60	-150	mA
Icch		70	mA
Iccl		90	mA
Ta	0°	+70°	C
PW	100%		OF TOTAL DELAY
d	50%		MAXIMUM DUTY CYCLE
Tc	100		PPM/°C

**DRIVE CAPABILITIES**

Nh	LOGIC 1 FANOUT	10 TTL LOADS MAX
Nl	LOGIC 0 FANOUT	10 TTL LOADS MAX

**NOTES:**

- \* TRANSFER MOLDED FOR BETTER RELIABILITY
- \* COMPATIBLE WITH TTL AND DTL CIRCUITS
- \* TERMINALS: ELECTRO-TIN PLATE PHOSPHOR BRONZE
- \* PERFORMANCE WARRANTY IS LIMITED TO SPECIFIED PARAMETERS LISTED

|| SMD ONLY ||

- \* TAPE & REEL AVAILABLE - 24mm WIDE x 12mm PITCH 500 PIECES/13' REEL
- \* DESIGNED FOR VAPOR PHASE OR IR SOLDERING WITH TEMPERATURES BELOW 230°C FOR UP TO 90 SECONDS
- \* SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

CAT9 R2-1/29/94

\*BELFS013\*