

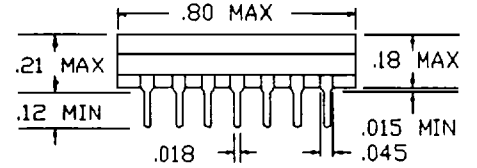
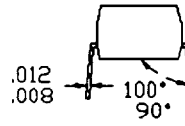
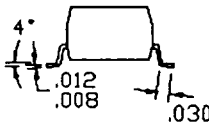
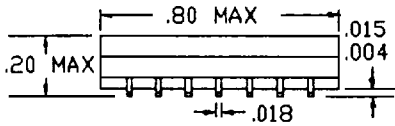
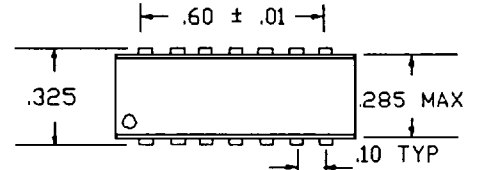
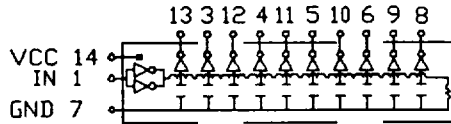
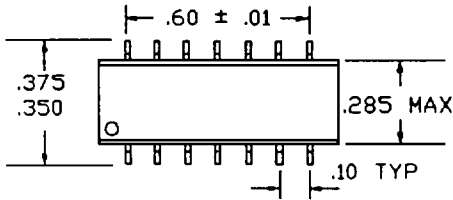
bel / defining a degree of excellence

FAST

LOGIC DELAY MODULES 10 TAP LEADING EDGE CONTROL

S422 SERIES

A447 SERIES



COPLANARITY ± .002

SMD PART NUMBER	THRU-HOLE PART NUMBER	TOTAL DELAY	DELAY PER TAP	RISE TIME
S422-0010-10	A447-0010-10	* 9 NS	1±0.5 NS	3 NS
S422-0020-10	A447-0020-10	* 18 NS	2±0.5 NS	3 NS
S422-0025-10	A447-0025-10	* 22.5 NS	2.5±1 NS	3 NS
S422-0030-10	A447-0030-10	* 27 NS	3±1.5 NS	3 NS
S422-0040-10	A447-0040-10	* 36 NS	4±1.5 NS	3 NS
S422-0050-10	A447-0050-10	50 NS	5 NS	3 NS
S422-0060-10	A447-0060-10	60 NS	6 NS	3 NS
S422-0070-10	A447-0070-10	70 NS	7 NS	3 NS
S422-0080-10	A447-0080-10	80 NS	8 NS	3 NS
S422-0090-10	A447-0090-10	90 NS	9 NS	3 NS
S422-0100-10	A447-0100-10	100 NS	10 NS	3 NS
S422-0125-10	A447-0125-10	125 NS	12.5 NS	3 NS
S422-0150-10	A447-0150-10	150 NS	15 NS	3 NS
S422-0200-10	A447-0200-10	200 NS	20 NS	4 NS
S422-0250-10	A447-0250-10	250 NS	25 NS	4 NS
S422-0300-10	A447-0300-10	300 NS	30 NS	4 NS
S422-0350-10	A447-0350-10	350 NS	35 NS	4 NS
S422-0400-10	A447-0400-10	400 NS	40 NS	4 NS
S422-0500-10	A447-0500-10	500 NS	50 NS	5 NS

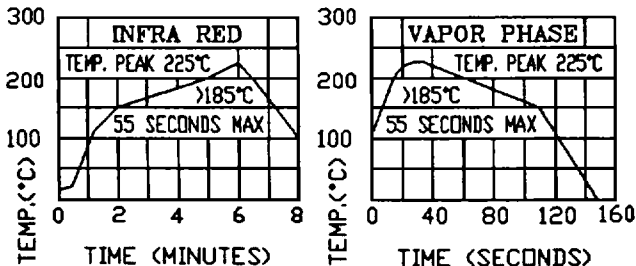
DELAYS MEASURED AT 1.5 V LEVELS ON LEADING EDGE WITH NO LOADS ON TAPS
RISE TIMES MEASURED FROM 0.75 V TO 2.4 V LEVELS
* REF. DELAY FROM P13, DELAY P1-P13 = 4 NS TYPICAL

OTHER DELAYS AND TOLERANCES UPON REQUEST

TOLERANCES

INPUT TO TAPS ± 2 NS OR 5% WHICHEVER IS GREATER
TAP TO TAP ± 2 NS OR 7% WHICHEVER IS GREATER
RISE TIMES ARE MAXIMUMS

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		40	µA
Iil		-1.2	mA
Ios	-60	-150	mA
Icch		50	mA
Iccl		90	mA
Ta	0*	+70*	C
PW		40%	OF TOTAL DELAY
d		50%	MAXIMUM DUTY CYCLE
Tc		100*(25000/TOTAL DELAY)	PPM/C

DRIVE CAPABILITIES

Nh	LOGIC 1 FANOUT	20 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 - 32mm WIDE x 16mm 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

CAT11

R2-12/20/94

BELFS016