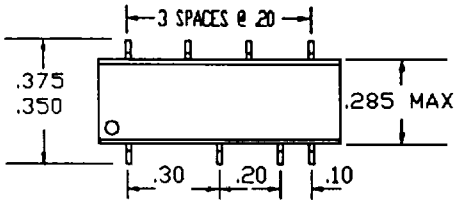
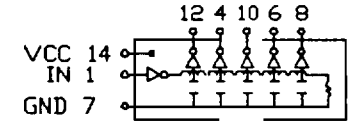
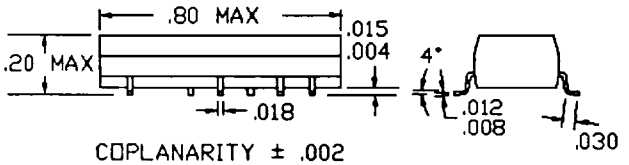
bel / defining a degree of excellence

HCMOS LOGIC DELAY MODULES
5 TAP LEADING EDGE CONTROL

S450 SERIES

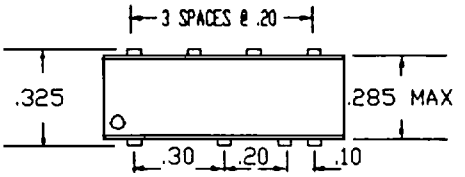


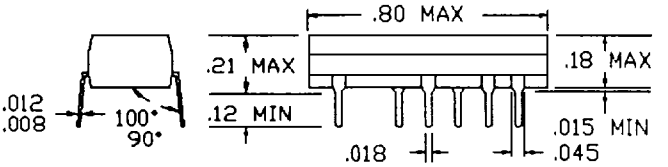




COPLANARITY ± .002

A450 SERIES





SMD PART NUMBER	THRU-HOLE PART NUMBER	TOTAL DELAY	DELAY PER TAP	RISE TIME
S450-0025-02	A450-0025-02	25 NS	5 NS	8 NS
S450-0030-02	A450-0030-02	30 NS	6 NS	8 NS
S450-0035-02	A450-0035-02	35 NS	7 NS	8 NS
S450-0040-02	A450-0040-02	40 NS	8 NS	8 NS
S450-0045-02	A450-0045-02	45 NS	9 NS	8 NS
S450-0050-02	A450-0050-02	50 NS	10 NS	8 NS
S450-0060-02	A450-0060-02	60 NS	12 NS	8 NS
S450-0070-02	A450-0070-02	70 NS	14 NS	8 NS
S450-0075-02	A450-0075-02	75 NS	15 NS	8 NS
S450-0080-02	A450-0080-02	80 NS	16 NS	8 NS
S450-0090-02	A450-0090-02	90 NS	18 NS	8 NS
S450-0100-02	A450-0100-02	100 NS	20 NS	8 NS
S450-0125-02	A450-0125-02	125 NS	25 NS	8 NS
S450-0150-02	A450-0150-02	150 NS	30 NS	8 NS
S450-0175-02	A450-0175-02	175 NS	35 NS	8 NS
S450-0200-02	A450-0200-02	200 NS	40 NS	8 NS

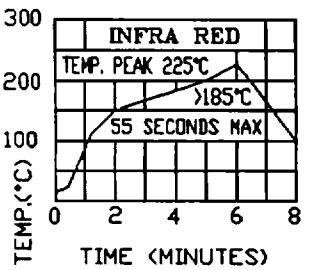
DELAYS MEASURED AT 50% LEVELS ON LEADING EDGE
WITH NO LOADS ON TAPS
RISE TIMES MEASURED FROM 10% TO 90% LEVELS

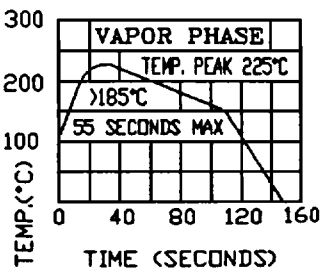
OTHER DELAYS AND TOLERANCES UPON REQUEST

TOLERANCES

INPUT TO TAPS ± 2 NS OR 5% WHICHEVER IS GREATER
TAP TO TAP ± 2 NS OR 7% WHICHEVER IS GREATER
RISE/FALL TIMES - MAXIMUM

SMD SOLDERING TEMPERATURE PROFILES





TEST CONDITIONS

Ein	PULSE VOLTAGE	5 VOLTS
Trin	RISE TIME	6 NS (10%-90%)
PW	PULSE WIDTH	1.2 x TOTAL DELAY
PP	PULSE PERIOD	4 x PULSE WIDTH
Iccl	SUPPLY CURRENT	25 mA TYPICAL
Vcc	SUPPLY VOLTAGE	5.0 VOLTS
Ta	AMBIENT TEMPERATURE	25°C

ELECTRICAL CHARACTERISTICS

		MIN	MAX	UNIT
Vcc	SUPPLY VOLTAGE	4.75	5.25	V
Vin	DC INPUT VOLTAGE	0	VCC	V
Vout	DC OUTPUT VOLTAGE	0	VCC	V
Vih	LOGIC 1 INPUT VOLTAGE	3.15		V
Vil	LOGIC 0 INPUT VOLTAGE		0.9	V
Ii	INPUT CURRENT	-1	+1	uA
Voh	LOGIC 1 OUTPUT VOLTAGE, @ 20 uA	4.40		V
	, @ 4 mA	3.84		V
Vol	LOGIC 0 OUTPUT VOLTAGE, @ -20 uA		0.1	V
	, @ -4 mA		0.4	V
Icch	LOGIC 1 SUPPLY CURRENT		40	uA
Iccl	LOGIC 0 SUPPLY CURRENT		30	mA
Ta	OPERATING FREE-AIR TEMPERATURE	-40°	+85°	C

PW	MINIMUM INPUT PULSE WIDTH	40% OF TOTAL DELAY
d	MAXIMUM DUTY CYCLE	50%
Tc	TEMP. COEFF OF TOTAL DELAY	100+(25000/TOTAL DELAY)PPM/°C

DRIVE CAPABILITIES

Nh	LOGIC 1 FANOUT	10 LSTTL LOADS MAX.
Nl	LOGIC 0 FANOUT	10 LSTTL LOADS MAX.

NOTES:

* TRANSFER MOLDED FOR BETTER RELIABILITY
* COMPATIBLE WITH TTL AND DTL CIRCUITS
* TERMINALS: ELECTRO-TIN PLATE PHOSPHER 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

CAT10 R2-1/29/94

BELFS023

BEL FUSE INC. /198 VAN VORST ST./JERSEY CITY, NJ 07302/PH (201) 432-0463/FAX (201) 432-9542