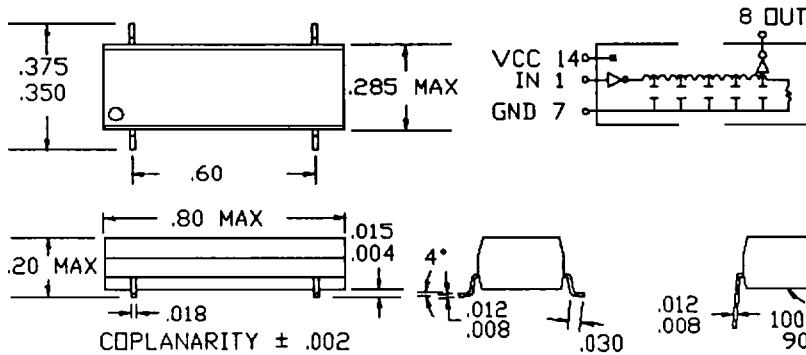


bel / defining a degree of excellence

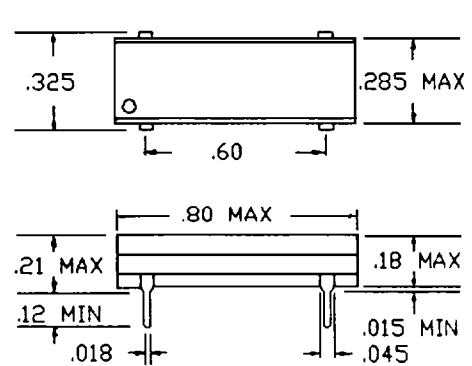
FAST

LOGIC DELAY MODULES 1 TAP LEADING & TRAILING EDGE CONTROL

S422 SERIES



A447 SERIES

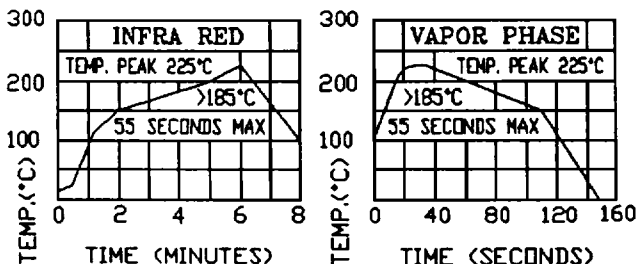


SMD PART NUMBER	THRU-HOLE PART NUMBER	TIME DELAY	RISE TIME
S422-0010-06	A447-0010-06	10 NS ±2NS	3 NS
S422-0020-06	A447-0020-06	20 NS ±2NS	3 NS
S422-0030-06	A447-0030-06	30 NS ±2NS	3 NS
S422-0040-06	A447-0040-06	40 NS ±2NS	3 NS
S422-0050-06	A447-0050-06	50 NS ±5%	3 NS
S422-0060-06	A447-0060-06	60 NS ±5%	3 NS
S422-0070-06	A447-0070-06	70 NS ±5%	3 NS
S422-0080-06	A447-0080-06	80 NS ±5%	3 NS
S422-0090-06	A447-0090-06	90 NS ±5%	3 NS
S422-0100-06	A447-0100-06	100 NS ±5%	3 NS
S422-0125-06	A447-0125-06	125 NS ±5%	3 NS
S422-0150-06	A447-0150-06	150 NS ±5%	3 NS
S422-0175-06	A447-0175-06	175 NS ±5%	3 NS
S422-0200-06	A447-0200-06	200 NS ±5%	3 NS
S422-0250-06	A447-0250-06	250 NS ±5%	3 NS
S422-0300-06	A447-0300-06	300 NS ±5%	4 NS
S422-0350-06	A447-0350-06	350 NS ±5%	4 NS
S422-0400-06	A447-0400-06	400 NS ±5%	4 NS
S422-0450-06	A447-0450-06	450 NS ±5%	4 NS
S422-0500-06	A447-0500-06	500 NS ±5%	5 NS

DELAYS MEASURED AT 1.5 V LEVELS ON LEADING & TRAILING EDGES
RISE TIMES MEASURED FROM 0.75 V TO 2.4 V LEVELS
MEASUREMENTS MADE WITH NO LOADS

OTHER DELAYS AND TOLERANCES UPON REQUEST

SMD SOLDERING TEMPERATURE PROFILES



TEST CONDITIONS

E_{in}	PULSE VOLTAGE	3.2 VOLTS
T_{rin}	RISE TIME	3.0 NS (10%-90%)
PW	PULSE WIDTH	1.2 x TOTAL DELAY
PP	PULSE PERIOD	4 x PULSE WIDTH
I_{ccl}	SUPPLY CURRENT	35 ma TYPICAL
V_{cc}	SUPPLY VOLTAGE	5.0 VOLTS
T_a	AMBIENT TEMPERATURE	25°C

ELECTRICAL CHARACTERISTICS

	MIN	MAX	UNIT
V_{cc}	4.75	5.25	V
V_{ih}	2.0		V
V_{il}		0.8	V
I_{ik}		-18	mA
I_{oh}		-1	mA
I_{ol}		20	mA
V_{oh}	2.7		V
V_{ol}		0.5	V
V_{ik}		-1.2	V
I_{ih}		20	uA
I_{il}		-0.6	mA
I_{os}	-60	-150	mA
I_{cch}		25	mA
I_{ccl}		40	mA
T_a	0°	+70°	C
PW	MINIMUM INPUT PULSE WIDTH	40% OF TOTAL DELAY	
d	MAXIMUM DUTY CYCLE	50%	
T_c	TEMP. COEFF. OF TOTAL DELAY	$100 \times (25000 / \text{TOTAL DELAY})$ PPM/°C	

DRIVE CAPABILITIES

N_h	LOGIC 1 FANOUT	10 TTL LOADS MAX
N_l	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

CAT 23 R1-1/15/94

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

BELTS015