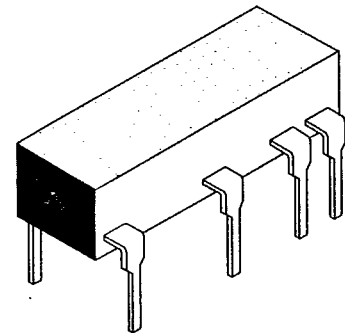



POLARA
AKC-SERIES

T-47-13

14 PIN, 5 TAP, Cmos ACTIVE

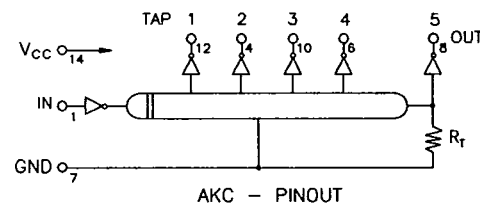
DC Electrical Characteristics		Test Conditions	Min	Max	Unit
V_{IH}	High-Level Input Voltage	$V_{CC}=4.5$ to 5.5	20		V
V_{IL}	Low-Level Input Voltage	$V_{CC}=4.5$ to 5.5		0.8	V
V_{OH}	High-Level Output Voltage	$V_{CC}=4.5, I_O=-4mA @ V_{IH}$ or V_{IL}	4.0		V
V_{OL}	Low-Level output Voltage	$V_{CC}=4.5V, I_O=4.0 @ V_{IH}$ or V_{IL}		0.3	V
I_L	Input Leakage current	$V_{CC}=5.5V @ V_{IH}$ or V_{IL}		± 10	μA
I_{CC}	Supply Current	$V_{CC}=5.5V, V_{IN}=0$		15	mA
T_{RO}	Output rise Time	550 nS (.75 - 2.4 Volts)		4	nS
		550 nS		5	nS
N_H	High Fanout	$V_{CC}=5.5V, V_{OH}=4.0V$	10		LSTTL Load



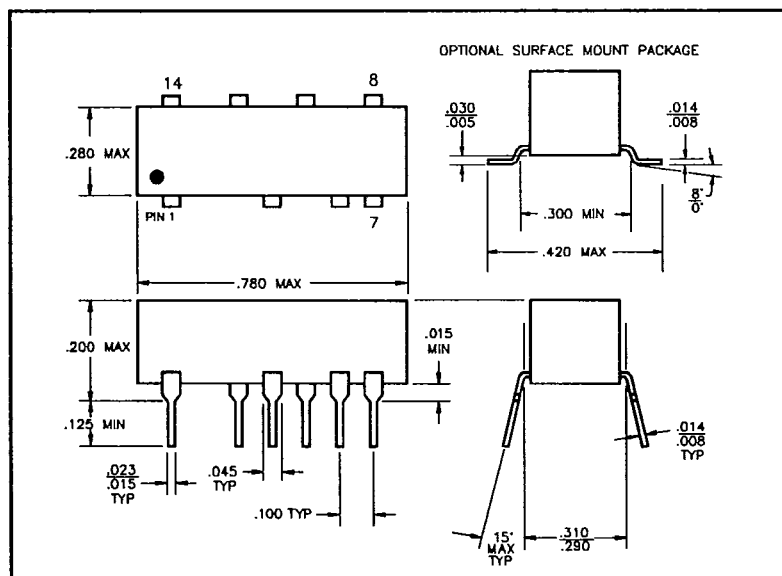
Recommended Operating Conditions		Min	Max	Unit
V_{CC}	DC Supply Voltage	4.5	4.5	V
V_I	DC Input Voltage Range	0	V_{CC}	V
V_O	DC Output Voltage Range	0	V_{CC}	V
I_O	DC Output Source/Sink Current		25	mA
P_W^*	Pulse Width % of Total Delay	40		%
d^*	Duty Cycle		40	%
T_A	Operating Free-Air Temperature	0	70	$^{\circ}C$

* These two value are inter-dependent.

Input Pulse Test Conditions @ 25 $^{\circ}C$ (Taps Unloaded)		Unit
E_{IN}	Pulse Input Voltage	3.2 Volts
PW	Pulse Width % of Total Delay	150 %
TRI	Pulse Rise Time(.75 - 2.4 Volts)	2.0 ns
PRR	Pulse Repetition Rate @ $T_d \leq 500ns$	1.0 MHz
	Pulse Repetition Rate @ $T_d > 500 ns$	500 KHz
V_{CC}	Supply Voltage	5.0 Volts



AKC - PINOUT



TOTAL DELAY $\pm 2 ns$ OR 5%	TAP DELAYS $\pm 2 ns$ OR 5%	POLARA P/N AKC - PINOUT
25	5	AKC-0025
30	6	AKC-0030
40	8	AKC-0040
50	10	AKC-0050
60	12	AKC-0060
75	15	AKC-0075
100	20	AKC-0100
125	25	AKC-0125
150	30	AKC-0150
175	35	AKC-0175
200	40	AKC-0200
225	45	AKC-0225
250	50	AKC-0250
300	60	AKC-0300
350	70	AKC-0350
400	80	AKC-0400
450	90	AKC-0450
500	100	AKC-0500
600	120	AKC-0600
700	140	AKC-0700
800	160	AKC-0800
900	180	AKC-0900
1000	200	AKC-1000

ADD "-S" SUFFIX TO P/N, TO ORDER SURFACE MOUNT PACKAGE.

DELAYS TIMES REFERENCED FROM INPUT.

*FOR DELAYS ABOVE 250 NS, HEIGHT IS .250 MAX.