

## Automation Displays DIGITAL READOUTS

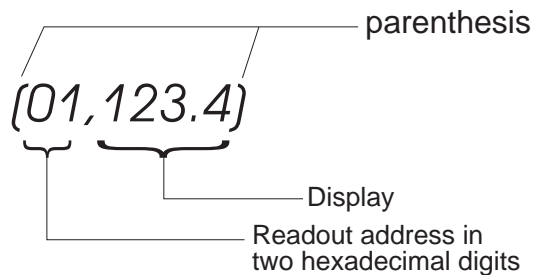
4-DIGIT model F489-RD4

5-DIGIT model F489-RD5

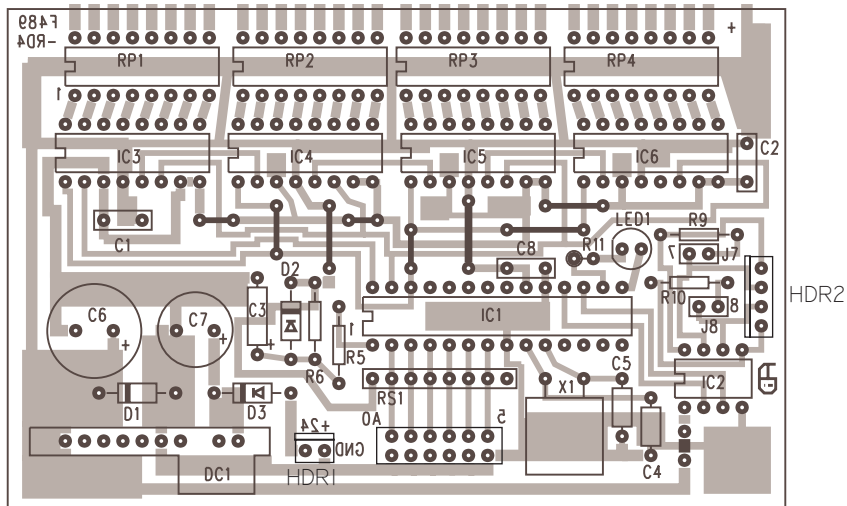
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Operates on 24 volts DC  
RS-422 communication - Multi-drop - Addressable up to 64 readouts  
Custom configurations available  
Bright red 0.8 inch (20.3 mm) digits

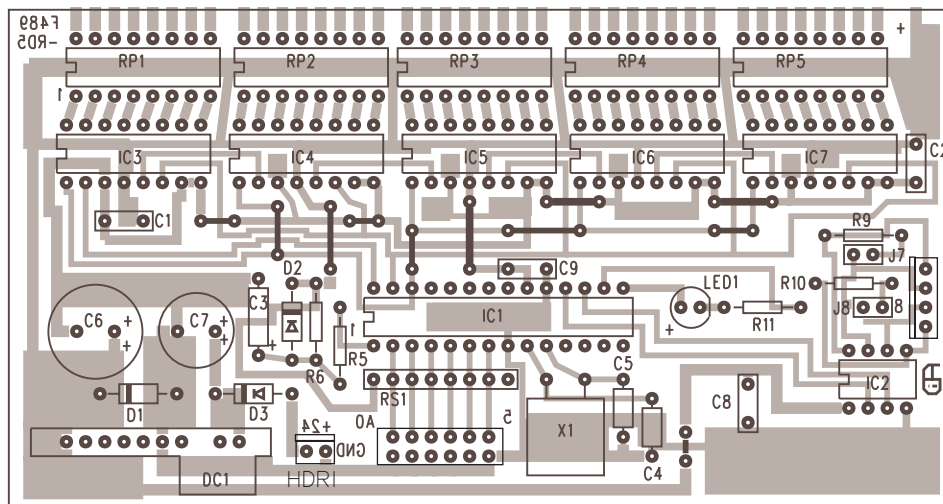
Simple ASCII data format:



Custom data formats available by request

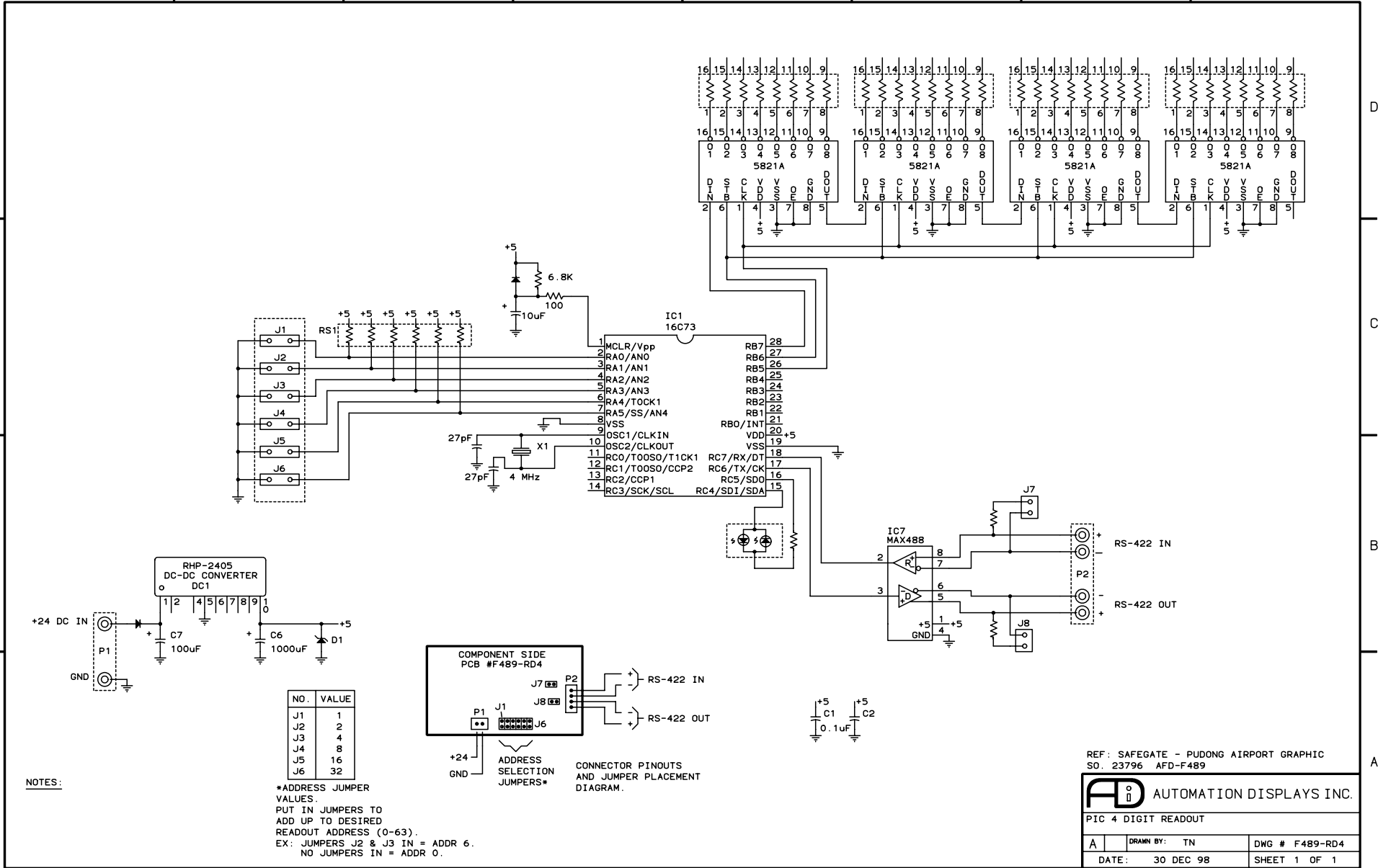


Description: Four-Digit readout assembly part # F489-RD4							
QTY	Ref	PART NO.	VENDOR	Description	PO#	EXT	Price
1		F489-RD4	Elec. Ind.	Logic PC board			
1		F489-RH4	Elec. Ind.	Readout PC board			
4		HDSP-N150	Hewlett Packard	0.8" Red 7-segment LED readout			
1	DC1	RHP-2405	Tamura	24 VDC-to-5 VDC converter			
2	C1, C2, C8	P4525-ND	Digi-Key/Panasonic	0.1 uF mylar capacitor			
1	C3	4066PHCT-ND	Digi-Key/Phillips	10 uF, 63V electrolytic capacitor			
2	C4,5			27 pF ceramic disk capacitor			
1	C6	P5169-ND	Digi-Key/Panasonic	1000 uF electrolytic capacitor			
1	C7	P5313-ND	Digi-Key/Panasonic	100 uF electrolytic capacitor			
1	D1	1N4733ACT-ND	Digi-Key	5.1 v Zener diode			
2	D2-D3	1N4004		silicon diode			
1	DC1	RHP-2405	Tamura	24 VDC-to-5 VDC converter			
1	IC1	PIC16F873-20/SP-ND	Digi-Key/Microchip	PIC 16F873-24/SP uP IC			
1		ED3128-ND		28 pin .300" DIP socket			
1	IC2			MAX3081 transceiver IC			
1				8 pin .300" DIP socket			
4	IC3-6	UCN5821A	Micrel	8-channel driver IC			
8	J1-J8			0.100" shunt jumper			
1	LED1	160-1058-ND	Digi-Key/LiteOn	Bicolor 2-lead T1 LED			
1	R5			100 ohm, 1/4 W resistor			
1	R6			6.8K, 1/4 watt resistor			
1	R9, R10			220 ohm, 1/4 W resistor			
1	R11			330 ohm, 1/4 W res. STANDING			
4	RP1-4			16 pin DIP resistor pack (1.5K ohm)			
4				16 pin .300" DIP socket			
1	RS1	750-81-R4.7K-ND	Digi-Key/CTS	7-channel SIP resistor pack			
1	HDR1	WM4200-ND	Digi-Key/Waldom	2-pin 0.100" header			
1	HDR2	WM4202-ND	Digi-Key/Waldom	4-pin 0.100" header			
1	X1	CTX006-ND	Digi-Key/CTS	4 Mhz crystal			



Description: Five-Digit readout assembly part # F489-RD5

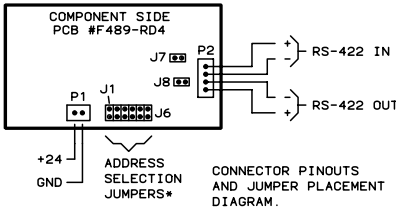
QTY	Ref	PART NO.	VENDOR	Description	PO#	EXT	Price
1		F489-RD5	Elec. Ind.	Logic PC board			
1		F489-RH5	Elec. Ind.	Readout PC board			
5		HDSP-3900	Hewlett Packard	0.8" Red 7-segment LED readout			
1	DC1	RHP-2405	Tamura	24 VDC-to-5 VDC converter			
2	C1-2, C8-9	P4525-ND	Digi-Key/Panasonic	0.1 uF mylar capacitor			
1	C3	4066PHCT-ND	Digi-Key/Phillips	10 uF, 63V electrolytic capacitor			
2	C4,5			27 pF ceramic disk capacitor			
1	C6	P5169-ND	Digi-Key/Panasonic	1000 uF electrolytic capacitor			
1	C7	P5313-ND	Digi-Key/Panasonic	100 uF electrolytic capacitor			
1	D1	1N4733ACT-ND	Digi-Key	5.1 v Zener diode			
2	D2-D3	1N4004		silicon diode			
1	DC1	RHP-2405	Tamura	24 VDC-to-5 VDC converter			
1	IC1	PIC16C73A-04/SP-ND	Digi-Key/Microchip	PIC 16C73A-04/SP uP IC			
1		ED3128-ND		28 pin .300" DIP socket			
1	IC2			MAX488 transceiver IC			
1				8 pin .300" DIP socket			
5	IC3-7	UCN5821A	Micrel	8-channel driver IC			
8	J1-J8			0.100" shunt jumper			
1	LED1	160-1058-ND	Digi-Key/LiteOn	Bicolor 2-lead T1 LED			
1	R5			100 ohm, 1/4 W resistor			
1	R6			6.8K, 1/4 watt resistor			
1	R9, R10			220 ohm, 1/4 W resistor			
1	R11			330 ohm, 1/4 W resistor			
5	RP1-5			8-channel DIP res pack, 330 ohm			
5				16 pin .300" DIP socket			
1	RS1	750-81-R4.7K-ND	Digi-Key/CTS	7-channel SIP resistor pack			
1	HDR1	WM4200-ND	Digi-Key/Waldom	2-pin 0.100" header			
1	HDR2	WM4202-ND	Digi-Key/Waldom	4-pin 0.100" header			
1	X1	CTX006-ND	Digi-Key/CTS	4 Mhz crystal			



NOTES:

NO.	VALUE
J1	1
J2	2
J3	4
J4	8
J5	16
J6	32

\*ADDRESS JUMPER VALUES  
 PUT IN JUMPERS TO ADD UP TO DESIRED READOUT ADDRESS (0-63).  
 EX: JUMPERS J2 & J3 IN = ADDR 6.  
 NO JUMPERS IN = ADDR 0.

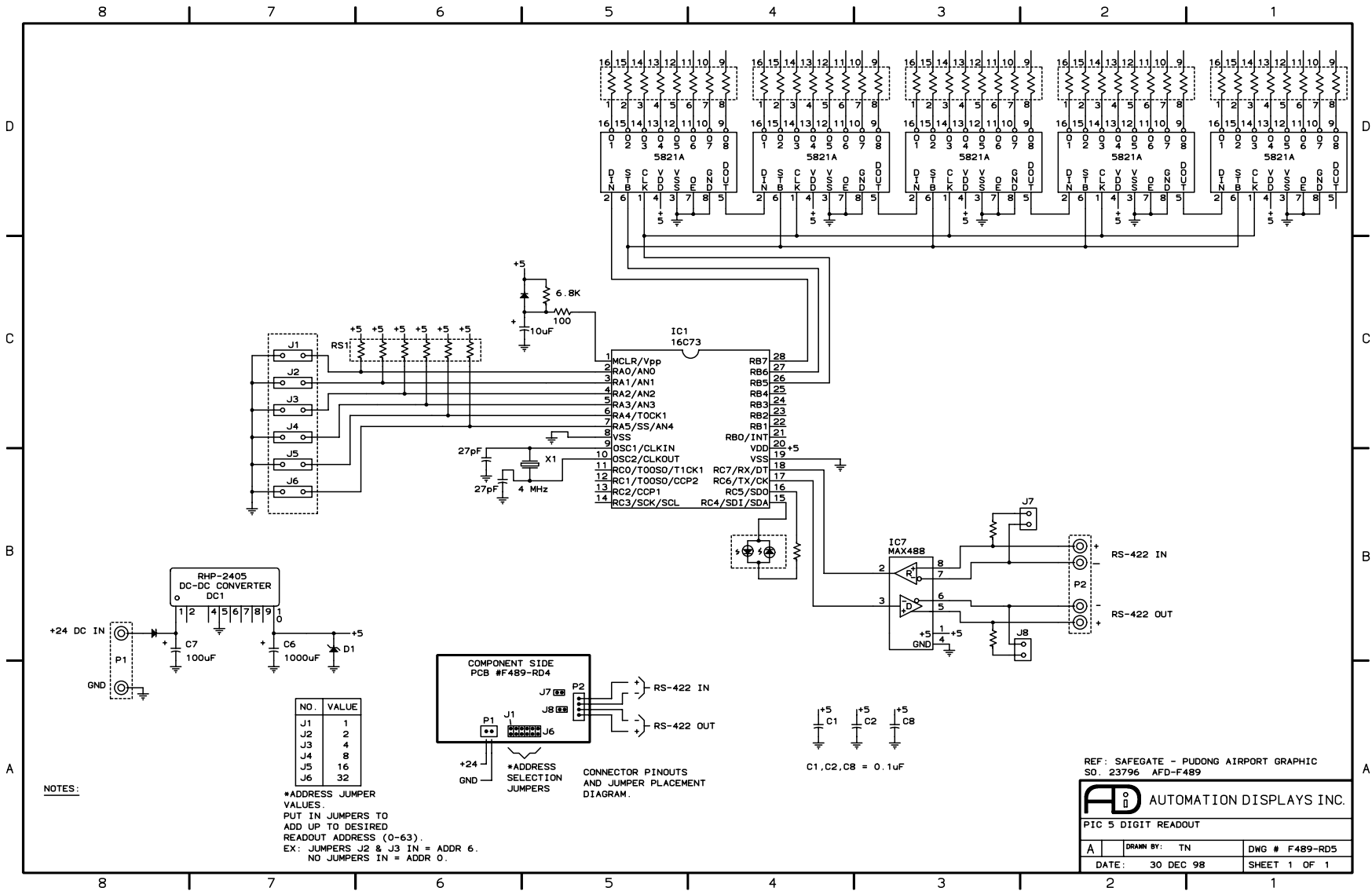


REF: SAFEGATE - PUDONG AIRPORT GRAPHIC  
 SO: 23796 AFD-F489

**AD** AUTOMATION DISPLAYS INC.

PIC 4 DIGIT READOUT

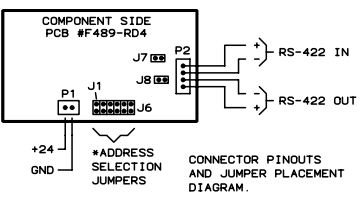
A	DRAWN BY: TN	DWG # F489-RD4
DATE:	30 DEC 98	SHEET 1 OF 1



NO.	VALUE
J1	1
J2	2
J3	4
J4	8
J5	16
J6	32

**NOTES:**

\*ADDRESS JUMPER VALUES.  
 PUT IN JUMPERS TO ADD UP TO DESIRED READOUT ADDRESS (0-63).  
 EX: JUMPERS J2 & J3 IN = ADDR 6.  
 NO JUMPERS IN = ADDR 0.



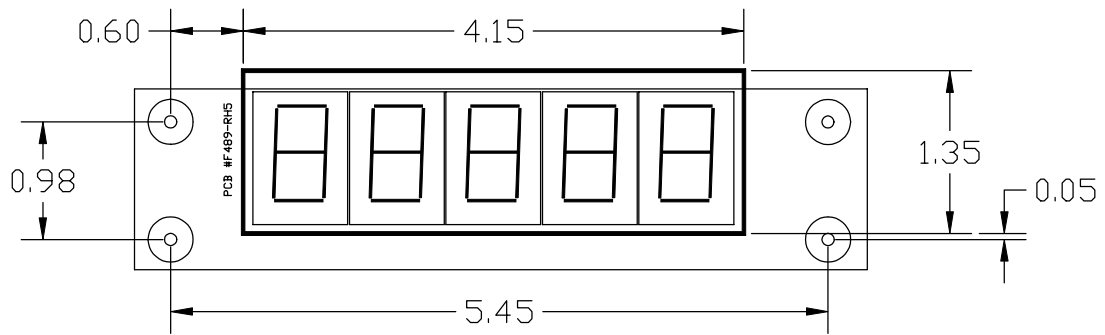
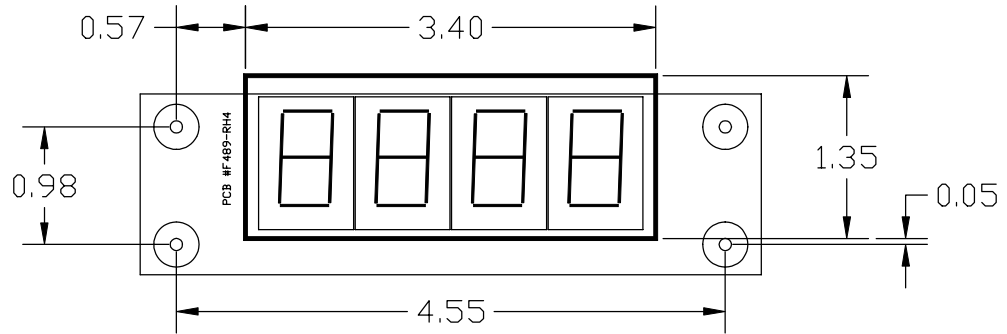
C1, C2, C8 = 0.1µF

REF: SAFEGATE - PUDONG AIRPORT GRAPHIC  
 SO. 23796 AFD-F489

**AD** AUTOMATION DISPLAYS INC.

PIC 5 DIGIT READOUT

A	DRAWN BY: TN	DWG # F489-RD5
	DATE: 30 DEC 98	SHEET 1 OF 1



NOTE: ALL DIMENSIONS IN INCHES

REQUIRED DEPTH BEHIND PANEL = 3.00"