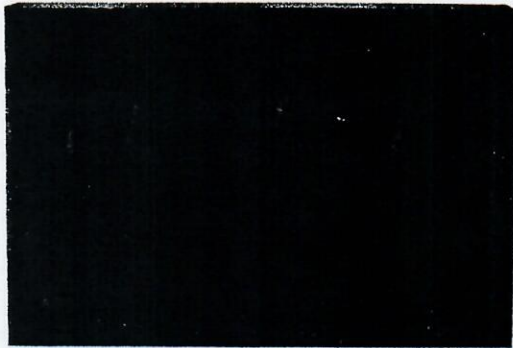


8 DIGIT MICROPROCESSOR LED SLAVE DISPLAY

"Flat Pack" No Panel Cut Out Required

(NEMA 3 or NEMA 4X)

MODEL
545



FLATPACK

Features

- Microprocessor Compatible
- Hexadecimal or BCD Codes
- Built-in 8x8 Static Memory
- 200nS Write Pulse Width
- Bright Efficient Display
- Zero Hold Time
- Multiplexed/Serial Input



SANITARY

DESCRIPTION: The 545 contains an 8 digit 0.4" LED display and the industry's standard 7218C microprocessor compatible decoder driver in a very compact 2"x3"x0.5" package. The 545 is available in the popular Flat Pack housing. The 545 accepts data in multiplexed format and displays it in either hexadecimal or code "B" format.

ADDRESSING: The digit to be updated is selected via DA₀-DA₂ while the data is written to ID₀-ID₃, then the write pin is brought low (Logic 0), just like a typical RAM. The "Hex" or "Code B" format is wired into the Flat Pack.

INTERFACE/DECODING/TIMING: Figures 1-5 show the recommended interface with popular microprocessor's bus systems, as well as timing and the internal decoding.

NOTE: The 545 can be supplied with the 7218A for serial input format on request, contact Otek.

For more detailed information, see ICM 7218C data sheet by Maxim, Harris, or Telcom, or request it from Otek.

HOUSING: Otek's Flat Pack requires no panel cut out. Just drill a 10mm (3/8") Ø hole, pass the wires through, attach the provided double-sided tape (to prevent rotation), align the flat pack, tighten the nut and make the connections to the wires. No connector or tools required! No behind the panel space needed! The case is U.L. approved ABS Polycarbonate 94VO rated. Optional NEMA 4X housing for a water tight seal. Our New Sanitary case is wall, pipe or panel mount and can include 2 flat packs, please specify.

POWER SUPPLIES: Externally mounted. Two types are available, the "Open Frame" style accepts 120/240VAC and delivers 5VDC at up to 400mADC. The "Power Pack" is a wall plug in module available only for 120VAC input and delivers 5VDC at up to 200mADC.

SPECIFICATIONS AT 25°C

Inputs	TTL/CMOS Compatible
Write Pulse Width	200nS min.
Input Set-up Time	200nS min.
Input Hold Time	None
Stand-by Current	10µA
All 8's Current	150mADC
Operating/Storage Temperature	-10° to +60°C/-20 to +70°C
Display	8 Digit .4" Red LED
MTBF	100,000 Hours
Sanitary Case	NEMA 4X up to 250°F Steam Cleaning

WARNING: Always apply power to the 545 first and then to your signal source (if separate supply is used) and turn off power to your signal source and then to the 545. The 545, like any other semiconductor is static sensitive. HANDLE WITH CARE.

LEAD COLOR

TERMINAL DESCRIPTION

BROWN	ID ₂ (BCD4)
YELLOW	DA ₂
GRAY	ID ₁ (BCD2)
RED	+5VDC, ±5%, 200mA
WHITE	ID ₀ (BCD1)
BLACK	Ground and Signal Common
GREEN	Write
ORANGE	ID ₃ (BCD8)
BLUE	DA ₀
VIOLET	DA ₁

ORDERING INFORMATION (1/1/97)

MODEL **5** **4** **5** **0**

DISPLAY FONT

- 0 Code "B"
- 1 Hexadecimal

POWER INPUT(1)

- 0 5VDC
- 1 Open Frame 120/240VAC
- 2 Power Pack 120VAC

HOUSING

- 0 NEMA 3
- 1 NEMA 4X
- 2 Sanitary

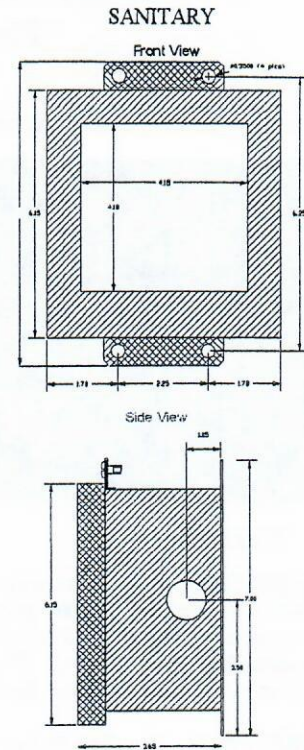
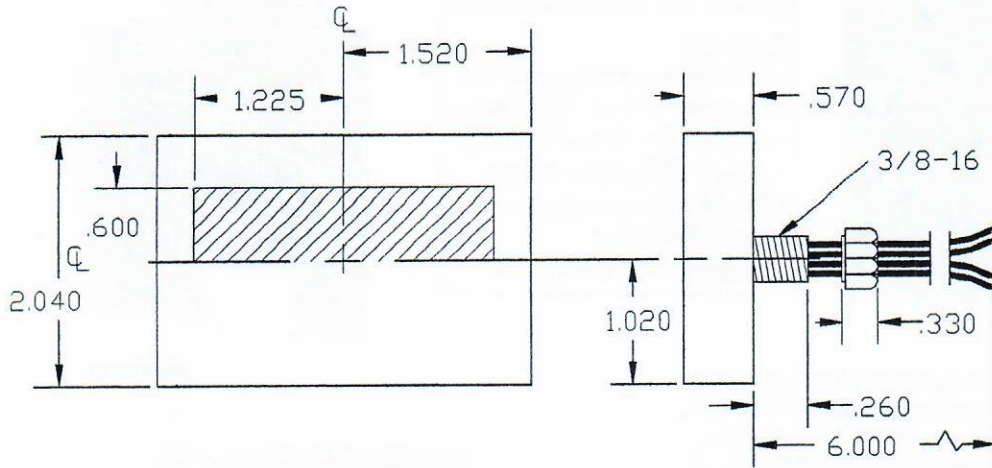
(1) See "Power Supplies" section above.

Serial Input (7211M) on request.

REMOTE DISPLAYS

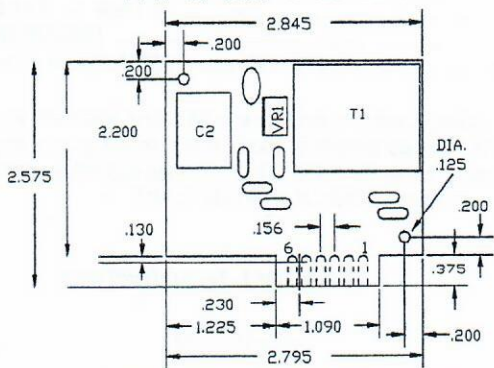
545 MECHANICALS & TYPICAL CONNECTIONS

FLAT PACK W/WIRES

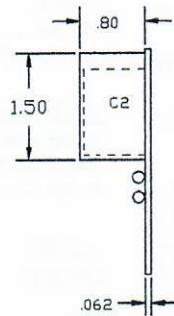


MECHANICALS FOR POWER SUPPLIES

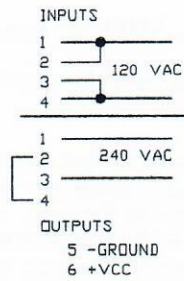
OPEN FRAME STYLE
P/N 81-3110, 5VDC OUTPUT



SIDE VIEW

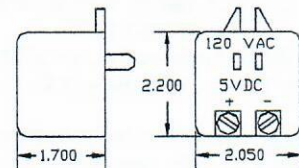


OPEN FRAME
POWER SUPPLY
TYPICAL CONNECTIONS



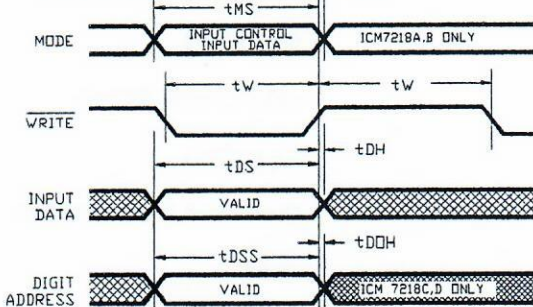
P/N 81-3110, 5VDC OUT

POWER PACK STYLE

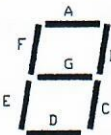


ORDER P/N 75-3110 FOR 5VDC

WRITE CYCLE TIMING



SEGMENT ASSIGNMENTS



DA2 ID2	DA1 ID1	DA0 ID0	SELECTED DIGIT
0	0	0	D1 LSD
0	0	1	D2
0	1	0	D3
0	1	1	D4
1	0	0	D5
1	0	1	D6
1	1	0	D7
1	1	1	D8 MSD

- NOTE: 1. $t_{MS} = t_{DS} = t_{DAS} \geq 250ns$
 2. $t_{MH} = t_{DH} = t_{DAH} \geq 0ns$
 3. $t_W = 200ns$
 4. WRITE IS FALLING EDGE SENSITIVE, NOT LEVEL SENSITIVE.
 5. NO DECIMAL POINTS ARE AVAILABLE CONSULT FACTORY.
 6. D1 IS L.S.D.

ID3	ID2	ID1	ID0	HEXADECIMAL	CODE B
0	0	0	0	0	0
0	0	0	1	1	1
0	0	1	0	2	2
0	0	1	1	3	3
0	1	0	0	4	4
0	1	0	1	5	5
0	1	1	0	6	6
0	1	1	1	7	7
1	0	0	0	8	8
1	0	0	1	9	9
1	0	1	0	A	-
1	0	1	1	b	E
1	1	0	0	C	H
1	1	0	1	d	L
1	1	1	0	E	P
1	1	1	1	F	(BLANK)

F#87MC545.DWG

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