



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

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### Features:

- ◇ Low-cost, high-performance replacement for many OEM DPMs
- ◇ Optional Red or Green backlighting
- ◇ Mounting choices:
  - Window mount for custom OEM
  - Surface mount with minimum space behind the panel
- ◇ Low power: choice of 180µA (9V, ±5V) or 2.5mA (+5V)
- ◇ Space-saving design: only 1" (25 mm) deep
- ◇ Occupies less than 2.5 X 1.1 inches of front panel space
- ◇ 3½ digits with high-contrast LCD
- ◇ Optional loop powered 4 to 20mA process inputs available (see DMO-590)

### Specifications:

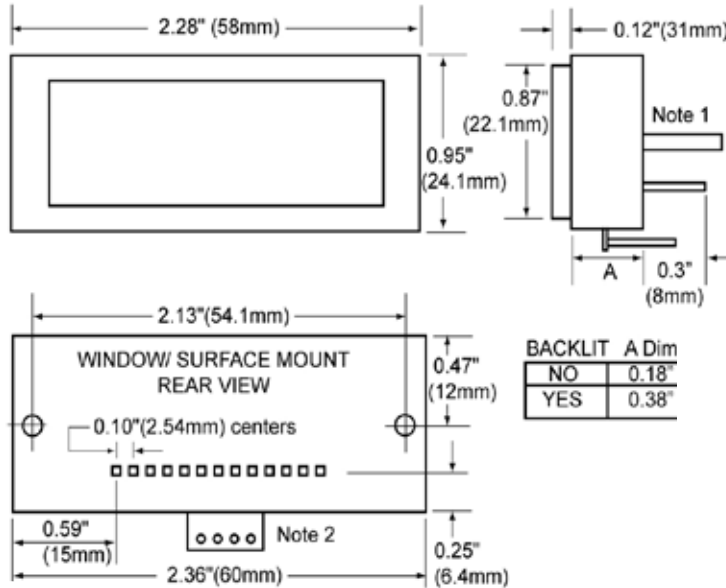
<b>Display:</b>	Digits:	3 ½ digits (±1999 counts)
	Type:	0.5" (12mm) high-contrast reflective LCD
	Backlighting:	Optional Red Negative (red numbers/black background) Optional Green Negative (green numbers/black background) Optional Green Positive (black numbers/green background)
	Polarity:	automatic, "-" displayed
	Decimal Points:	3 position, user selectable
	Overrange:	three lower order digits blank for inputs >1999 & < -1999
	Hold:	available OEM option, contact factory
<b>Inputs:</b>	Ranges:	±200.0 mV, ±2.000 V, ±20.00 VDC
	Configuration:	bipolar & differential
	Protection:	±350 VDC, (±100 VDC on 200 mV range)
	Impedance:	>10 MΩ, (>1 MΩ on 20 V range)
<b>Performance:</b>	Accuracy:	±(0.1% + 1 count) typical ±(0.1% + 2 counts) maximum
	Conversion Rate:	2.5 per second
	Normal Mode Rejection:	>30 dB @ 60 Hz
	Common Mode Range:	±1 VDC
	Common Mode Rej.:	>86 dB
	Zero Adjustment:	automatic
	Warmup:	10 minutes typical
	Temperature Coefficient:	±100 ppm per °C typical
<b>Environment:</b>	Operating Range:	0 to 50 °C
	Storage Range:	-20 to 70 °C
<b>Power Supply:</b>	5V powered:	+5 VDC (±5%) at 2.5 mA
	9V(±5V) powered:	+7.2 to +12 V at 180 µA
	Optional Backlight:	+5 VDC at 100 mA typical
<b>Mounting:</b>		surface or window mount
<b>Connection:</b>		13 pins, 0.025" square on 0.1" centers - pin 3 missing

### Ordering Information:

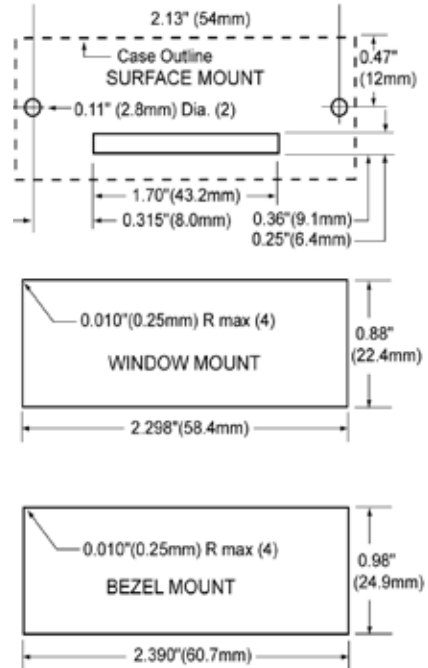
PART NUMBER	BACKLIGHT COLOR	METER INPUT	METER POWER	BACKLIGHT POWER
DK101	NO BACKLIGHT	200mV	9V	NONE
DK102	NO BACKLIGHT	2V	9V	NONE
DK103	NO BACKLIGHT	20V	9V	NONE
DK301	NO BACKLIGHT	200mV	5V	NONE
DK302	NO BACKLIGHT	2V	5V	NONE
DK303	NO BACKLIGHT	20mV	5V	NONE
DK311	POS GREEN	200mV	9V	5VDC
DK312	POS GREEN	2V	9V	5VDC
DK331	POS GREEN	200mV	5V	5VDC
DK332	POS GREEN	2V	5V	5VDC
DK411	NEG GREEN	200mV	9V	5VDC
DK412	NEG GREEN	2V	9V	5VDC
DK431	NEG GREEN	200mV	5V	5VDC
DK432	NEG GREEN	2V	5V	5VDC
DK511	NEG RED	200mV	9V	5VDC
DK512	NEG RED	2V	9V	5VDC
DK531	NEG RED	200mV	5V	5VDC
DK532	NEG RED	2V	5V	5VDC
J1C4				4 Pin Connector / Wire Assembly
J1C13				13 Pin Connector / Wire Assembly
PW2-5				Regulated 120V AC to 5V DC Power Supply
PW2-12				Regulated 120V AC to 12V DC Power Supply
PW1.0				24V AC to adjustable DC output
CPW1.5				24V AC to adjustable DC output
CVC				Calibrator

## Dimensions & Wiring Connections

### WINDOW/SURFACE MOUNT DIMENSIONS



### PANEL CUTOUTS



### CONNECTION DESCRIPTION

#	13-PIN	DESCRIPTION
V+		POSITIVE DPM PWR SUPPLY
V-		NEG PWR FOR 9V OR ± 5V DPMS
NC		NO PIN
GND		NEG PWR FOR +5V DPMS
COM		ANALOG COMMON
INLO		DISPLAY INPUTS: DISPLAY IS NEGATIVE
INHI		IF INHI IS LOWER THAN INLO
RFL (CLK)		NEGATIVE REFERENCE INPUT (AND OPTIONAL HOLD)
RFH		POSITIVE REFERENCE INPUT
ROH		INTERNAL REFERENCE OUTPUT
D3		DECIMAL POINT = 1XX.X*
D2		DECIMAL POINT = 1X.XX*
D1		DECIMAL POINT = 1.XXX*

\* Connect to Pin 1