DUAL CHANNEL HOUR METER & MAINTENANCE MONITOR MODULE

MODEL 759





DESCRIPTION

The Curtis Model 759 dual channel solid-state hour meter & maintenance monitor is a highly reliable, PCB mountable module. It includes two separate elapsed time indicators.

APPLICATION

Ideal for OEMs, contract manufacturers and panel makers for monitoring equipment usage, scheduling maintenance, warranty validation, rental/leasing use and more. Can be used extensively in industrial, agricultural and specialty vehicles, as well as applications such as: vending machines, medical, office equipment and consumer products.

FEATURES

- One device provides tracking of total and maintenance hours for warranty monitoring.
- Microprocessor based two channel design assures accurate, reliable operation.
- Factory programmed service intervals can be specified to match unique application requirements. Maintenance interval counts up from 0.
- Integrated push-button for toggling of LCD items: total hours, and maintenance hours.
- Silent operation without gear and motor noises of electro-mechanical devices.
- Easy-to-read, high-contrast, dual function LCD assures clear visibility.
- Compact module design allows for versatile installation options within a small area.
- OEM Compatibility an unparalleled selection of power compatibility, design configurations and functionality for OEM custom designs, panel makers and contract manufacturers.
- Distinctive icons provide clear indicators of hour meter/timer activation and display modes.
- Manufactured under ISO 9001 Certified Quality Management System.

MODEL 759

SPECIFICATIONS

Operating Specifications

Parameter	Min	Nominal	Max	Units	Conditions
Operating Voltage	4.75	5.0	5.5	Volts	Voltage at pin J-1
Operating Current	-	-	20	mA	Vdd=5V, LED Output = ON
Re-arm Time	5	-	-	sec	-

Hour Meter Enable/Reset Specifications

Parameter	Min	Nominal	Max	Units	Conditions	
Input Current	-	-	1000	μA	Vdd=5V	
Input High	2.05	-	-	Volts	-	
Input Low	-	-	0.75	Volts	-	
Hour Meter Accuracy	0.1	-	-	%	-	

MODEL CHART

Model	Reset	Sequence Number
759P	R (toggle & resettable)	-000X

ENVIRONMENTAL

Temperature Range

Operating: -40° C to $+70^{\circ}$ C Storage: -40° C to $+85^{\circ}$ C

(Note: display will be legible but will operate with reduced contrast and increased transition time at low temperatures).

Vibration

Meets SAE J 1378 July 98. Double amplitude of 1.53 mm with frequency sweep from 10-80-10 Hz (20 g max.) at intervals of 1 minute.

Shock

SAE J 1378 Mar 83. Amplitude 44–55g, half sine, 9–13 ms duration.

Humidity

SAE J $14\overline{5}5$ Aug 94 section 4.2.3 8-hour humidity cycle as per figure 4a.

EMC

ESD: Designed to withstand ±8 kV air discharge and ±4 kV contact discharge. Pins 1,2,3,8 only.

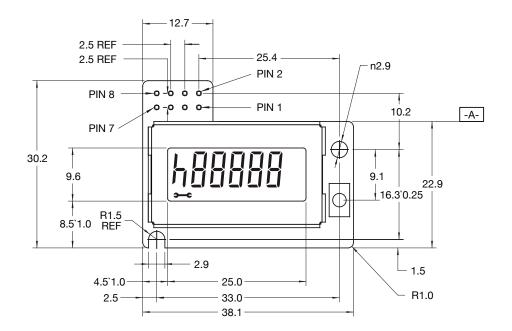
Regulatory Approval

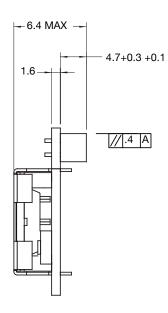
RoHS Compliant.

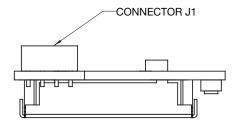
Notes

- All modules are supplied with critical components exposed.
 If the module is being used in an environment other than specified, the user must take precautions to package the module to provide adequate protection.
- 2. For proper mechanical support, all module pins should be soldered to the PC-board.
- To prevent heat damage to components, module face should be 10–20mm minimum away from PC-board when flow soldered.

DIMENSIONS mm







CONNECTOR J1

PIN#	DESCRIPTION	
1	VSS (POWER SUPPLY RETURN)	
2	2 ENABLE	
3	VCC (+5.0 VDC)	
4	N/C	
5	N/C	
6	N/C	
7	N/C	
8	LED OUTPUT*	

^{*} This output is intended to drive an off-module LED to indicate that the expected maintenance period has been exceeded. The output provides a logical high along with an appropriate series resistor for the indicator LED. Once the preset maintenance time is exceeded the output will remain high until the meter is put into maintenance mode and reset.

WARRANTY Two year limited warranty (see terms of sale for specifics).

