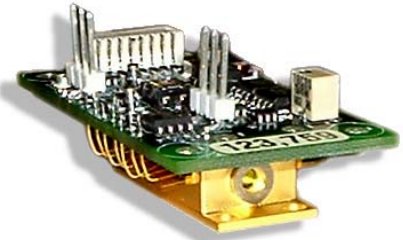




Compact PCB QCW Laser Diode Power Module

- OUTPUT CURRENT UP TO 5.0 AMPS QCW
- IDEAL FOR HIGH POWER LASER DIODES
- COMPLIANCE VOLTAGE FROM 1.6 TO 2.0VDC
- COMPACT PCB DESIGN
- ADJUSTABLE PULSEWIDTH FROM 2ms TO 8ms
- 3VDC INPUT POWER



Laser not included.

DESCRIPTION:

The Model 781 is a single channel, non-isolated compact QCW laser diode driver. The high efficiency design will drive diodes up to 2V with 3V input. Current amplitude is trimpot adjustable and the output pulsewidth can be set equal to the input pulsewidth, fixed at 8ms, and can be truncated by an external detector signal input or by a detector in the laser package, if present (jumper selectable). Threshold adjusts via PCB mount pot (R28) and a test point is provided to set the threshold. Jumper (J8) selects source to truncate pulse: (1) external signal via coax or (2) photodiode inside laser package.

SPECIFICATIONS:

Input:		Monitor	Scale: 1V = 5A; Accuracy: $\pm 5\%$ from 3A to 5A. Receive differentially. Chassis ground (connected to laser anode) is separate from system ground (connected to Battery-). All internal voltages are reference to the minus side of battery. Pin 8 of J9 is connected to Battery- to facilitate interface.
Power	3VDC	Polarity	Non-isolated (Input/Output Grounds are common) Laser Diode has anode = case.
Trigger	Opto-coupled; +5V at 10mA nominal; Min 10 μ s pulsewidth.	Risetime	$\leq 500\mu$ s
Photodiode	Pulsewidth can be truncated by input signal from customer-supplied detector output.	Ave. Power	0.5W
Output:		Duty Factor	5% maximum
Voltage	1.6 to 2.0V diode load	Protection:	Open circuit (laser) protection
Current	5A QCW maximum, trimpot adjustable	Connections:	Thru holes to butterfly laser package
Pulsewidth	2ms to 8ms adjustable via input pulsewidth to within $\pm 5\%$ fixed at 8ms (jumper selectable); or truncated by external photodiode input.	Cooling:	No external heatsinking required
		PCB Size:	1.9" x 1.1" x 0.31"
		Temperature:	-40°C to +60°C Operating

Specifications subject to change without notice.



APPLICATIONS:

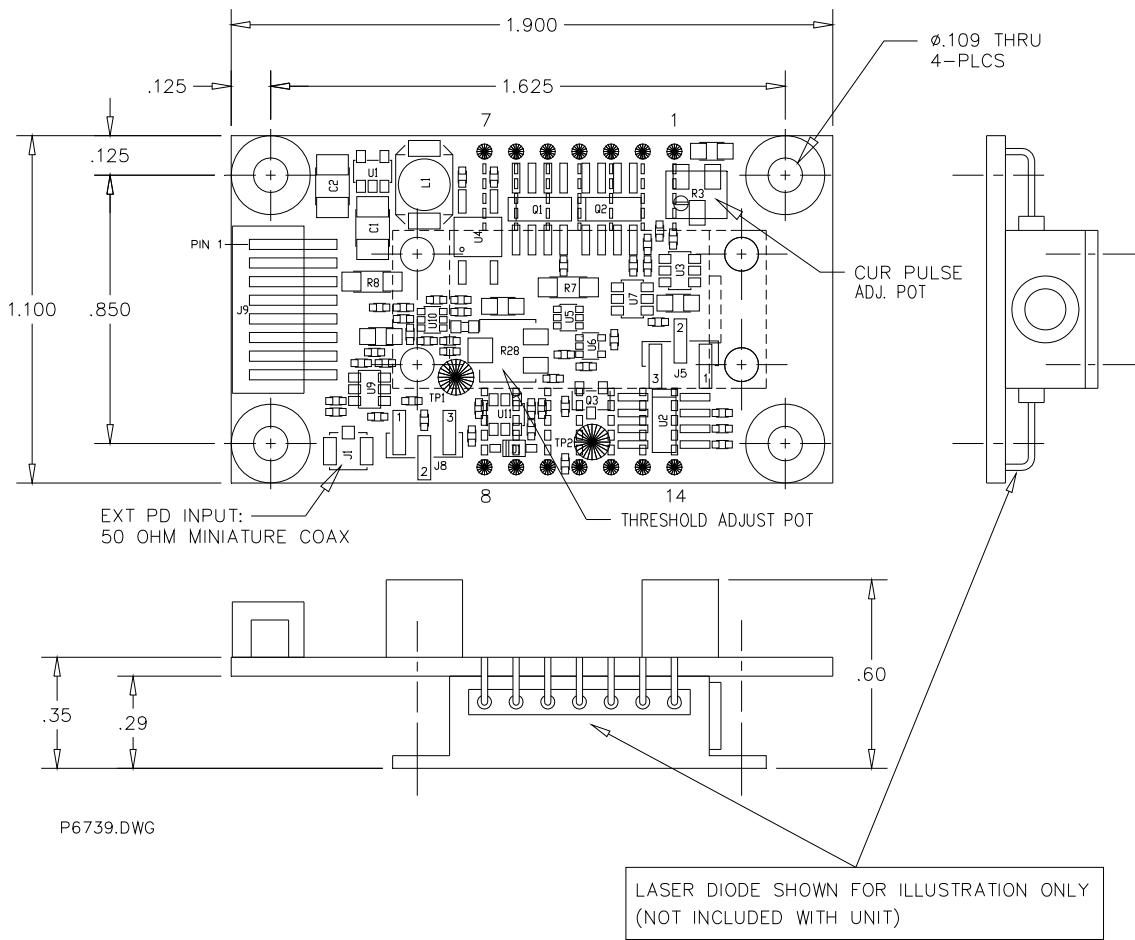
CW Laser Diode Current Source

"In the event this commodity will be transferred to a "foreign person" as defined in 22 CFR 120.16, either outside or within the United States, a validated US State Department license is required."

		MODEL NUMBER
		OUTPUT CURRENT
		5.0A Max
INPUT VOLTAGE	3VDC	781

Typical Part Number: 781 = Output Current: 0.2 to 5.0A
 Voltage Compliance: 1.6 to 2.0V
 Current Control: Via Trimpot

NOTES:
 1. ALL SPECIFICATIONS SUBJECT TO CHANGE



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