

44098

DIODE MODULE

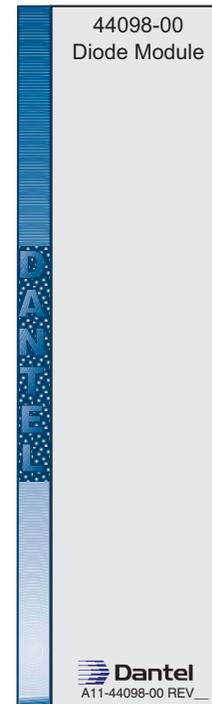


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About this Practice:

This practice has been reissued to:

- Meet ISO 9001 requirements.

Reissued Practices: Updated and new content can be identified by a banner in the outside margin.

Issue date: January 1999

UPDATED

CAUTION

- Install or remove modules from the shelf only when the power is off. If you install a module in the shelf with the power on, the internal circuitry may suffer damage and the product warranty will be void.
- Remove and install circuit boards only in a static-safe environment (use antistatic wrist straps, smocks, footwear, etc.).
- Keep circuit boards in their antistatic bags when they are not in use.
- Do not ship or store circuit boards near strong electrostatic, electromagnetic, magnetic, or radioactive fields.
- For more complete information on electrostatic discharge safety precautions, refer to Bellcore™ Technical Reference # TR-NWT-000870.

ORDERING INFORMATION

NOTE: This section lists the different options available for this product. To order any of the available options, contact Dantel Inside Sales through our toll-free number, **1-800-432-6835**.

OPTION NUMBER	FEATURES
A11-44098-00	Diode Module

GENERAL DESCRIPTION

The 44098 Diode Module provides 28 one-ampere diodes for general purpose low-power isolation applications between circuits, circuit components, and peripheral devices.

The 44098 is a plug-in printed circuit module that fits into any Dantel 400-type or similar equipment housing.

The 44098 comes as a basic unit only with no options, accepts no subassemblies, and requires no external power.

CIRCUIT DESCRIPTION

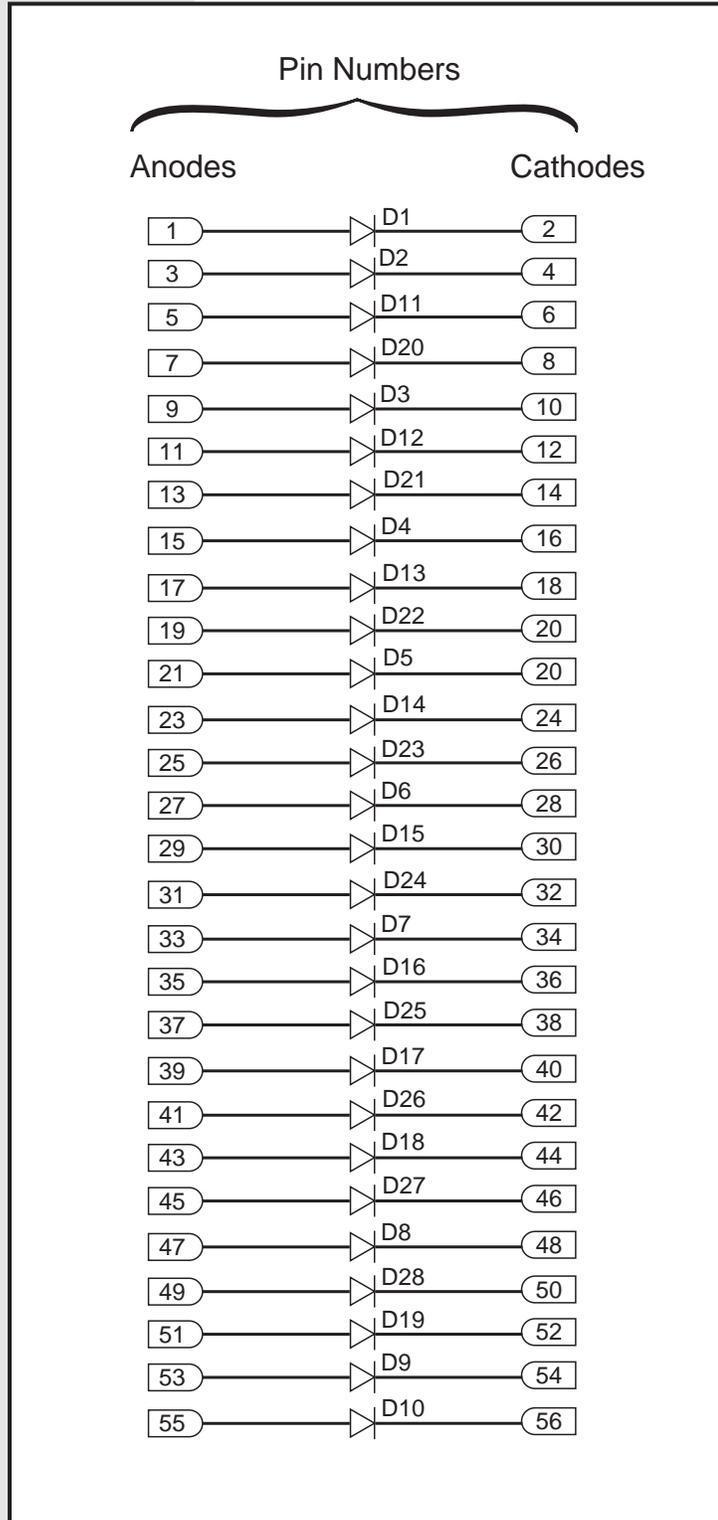
The 44098 Diode Module functional schematic is shown in Fig. 1.

The circuit board consists of 28 1N4005 one-ampere diodes, each connected individually to edge connector pins on the module.

Pin designations for the diodes are arranged so that all cathodes are connected to even numbered pins, and all anodes to odd numbered pins. Refer to Fig.1.

CIRCUIT DESCRIPTION

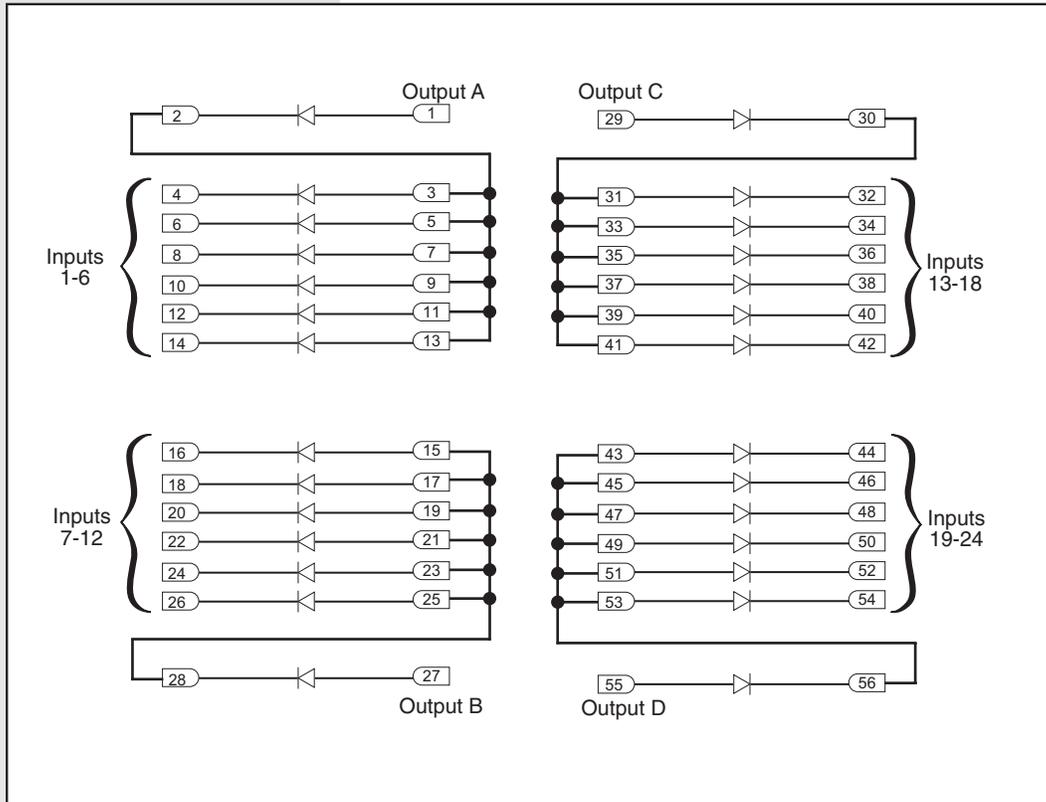
FIG. 1 - FUNCTIONAL SCHEMATIC



APPLICATION INFORMATION

The primary application of the 44098 Diode Module is to provide general purpose low-power isolation applications between circuits, circuit components, and peripheral devices. Refer to Fig. 2 for an example application.

FIG. 2 - EXAMPLE APPLICATION. SUMMING CIRCUITS (NEGATIVE LOGIC), 44098



INSTALLATION

Install the module in the proper slot in the shelf. Normally the 56-pin edge connector for the slot is prewired at the factory. If you are going to wire the connector, refer to Fig. 1 for connector pin wiring assignments. Wire the connector in the shelf or housing as required.

TECHNICAL SPECIFICATIONS

DESCRIPTION	VALUE
Maximum Diode Rating	
Peak Repetitive Reverse Voltage (FROM)	600 Volts
Working Peak Reverse Voltage (VRWM)	600 Volts
DC Blocking Voltage (VR)	600 Volts
Non-Repetitive Peak Reverse Voltage (halfwave, single phase, 60HZ)	720 Volts
RMS Reverse Voltage (VR(RMS))	420 Volts
Average Rectified Forward Current (IO)	1.0 Amp
Non-Repetitive Peak Surge Current (IFSN)	30 Amps
Diode Electrical Characteristics	
Maximum Instantaneous Forward Voltage Drop (vF)	
Typical	0.93 Volts
Maximum	1.1 Volts
Maximum Full-Cycle Average Forward Voltage Drop (VF(AV))	0.8 Volts
Maximum Reverse Current (IR)	
@ 25° C Junction Temperature (typical)	0.05 uA
@ 25° C Junction Temperature (maximum)	10 uA
@ 100° C Junction Temperature (typical)	1.0 uA
@ 100° C Junction Temperature (maximum)	50 uA
Maximum Full-Cycle Average Reverse Current (IR(AV))	30 uA
Operating Temperature Range	0° to 60° C.
Physical Dimensions	1.4" x 6" x 5.6"
Weight	3.9 ounces

WARRANTY

LIMITED WARRANTY

The Seller warrants that the standard hardware products sold will be free from defects in material and workmanship and perform to the Seller's applicable published specifications for a period of 18 months for hardware, and 3 months for software, from the date of the original invoice. The liability of the Seller hereunder shall be limited to replacing or repairing, at its option, any defective products which are returned F.O.B. to the Seller's plant, (or, at the Seller's option, refunding the purchase price of such products). In no case are products to be returned without first obtaining permission and a customer return authorization number from the Seller. In no event shall the Seller be liable for any consequential or incidental damages.

Equipment or parts which have been subject to abuse, misuse, accident, alteration, neglect, unauthorized repair or installation are not covered by warranty. The Seller shall make the final determination as to the existence and cause of any alleged defect. No warranty is made with respect to custom equipment or products produced to the Buyer's specifications except as specifically stated in writing by the Seller in the contract for such custom equipment.

This warranty is the only warranty made by the Seller with respect to the goods delivered hereunder, and may be modified or amended only by a written instrument signed by a duly authorized officer of the Seller and accepted by the Buyer.

Warranty and remedies on products not manufactured by the Seller are in accordance with warranty of the respective manufacturer. THE SELLER MAKES NO OTHER WARRANTY OF ANY KIND WHATSOEVER, EXPRESSED OR IMPLIED; AND ALL IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE WHICH EXCEEDS THE AFORESAID OBLIGATIONS IS HEREBY DISCLAIMED BY THE SELLER.

IN CASE OF DIFFICULTY

If you experience difficulty with this equipment, check the following, as appropriate:

1. Switch settings
2. Signal levels
3. Software configuration
4. Connections between Dantel's equipment and your equipment.

If there is still a problem, substitute equipment that is known to be good. For additional assistance, call Dantel's Technical Field Service Department weekdays, 6 A.M. to 5 P.M. pacific time:

1-800-4DANTEL (1-800-432-6835).

If a thorough checkout shows a piece of equipment has malfunctioned, you may return it to the factory. For repairs and emergency replacements, obtain a Return Material Authorization (RMA) number from the Customer Service Representative at **1-800-4DANTEL (1-800-432-6835)**.

To ensure expedient processing of your order, provide a purchase order number and shipping and billing information when requesting an RMA number. Also, when the units are returned to Dantel, include a description of the failure symptoms for each unit returned. Send defective equipment to:

Dantel, Inc. • 2991 North Argyle Avenue • Fresno, California 93727-1388

