

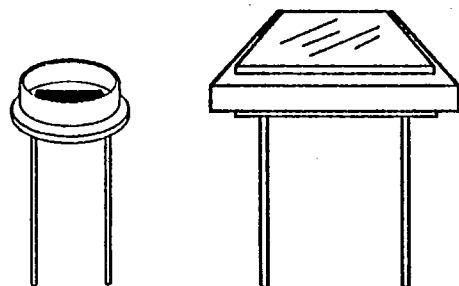


# TECHNICAL DATA SHEET

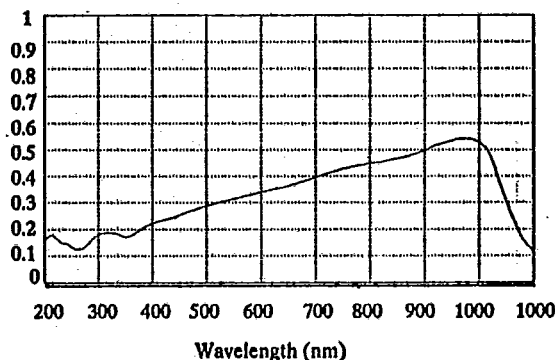
## SUPER U.V. PHOTODIODES

T-41-51

The new series 7 photodiodes are designed for high responsivity and shunt resistance in the UV region. It is particularly intended for analytical, light measurement, HPLC, photometry and fluorescence applications where sensitivity from 190nm to 400nm is important.



Responsivity (A/W)\*



### ELECTRICAL/OPTICAL SPECIFICATIONS

Characteristics measured at 22°C (±2)

| Type no. | Active area     |         | Responsivity A/W* |                   | Dark current pA<br>@Vr = 10mV<br>Typical | NEP W/Hz <sup>1/2</sup><br>Typical<br>λ = 900nm | Capacitance pF,<br>Typical | Rise time us,<br>Vr = 0V<br>RL = 1KΩ<br>Typical | Shunt resistance Gohm<br>@Vr = ±10mV |         | Package Type<br>See Reverse | Window Options available |
|----------|-----------------|---------|-------------------|-------------------|------------------------------------------|-------------------------------------------------|----------------------------|-------------------------------------------------|--------------------------------------|---------|-----------------------------|--------------------------|
|          | mm <sup>2</sup> | mm      | @254nm<br>Typical | @340nm<br>Typical |                                          |                                                 |                            |                                                 | Minimum                              | Typical |                             |                          |
| OSD1.2-7 | 1.2             | 1.1x1.1 | 0.14              | 0.19              | 2                                        | 3x10 <sup>-15</sup>                             | 40                         | 0.1                                             | 0.5                                  | 5       | 1                           | Q,U                      |
| OSD5.8-7 | 5.8             | 2.4x2.4 | 0.14              | 0.19              | 3                                        | 6x10 <sup>-15</sup>                             | 170                        | 0.4                                             | 0.5                                  | 3       | 2,5                         | Q,U,O                    |
| OSD35-7  | 33.6            | 5.8x5.8 | 0.14              | 0.19              | 20                                       | 1.5x10 <sup>-14</sup>                           | 1000                       | 2.0                                             | 0.1                                  | 0.5     | 3,6                         | Q,O                      |
| OSD100-7 | 100             | 10x10   | 0.14              | 0.19              | 50                                       | 2x10 <sup>-14</sup>                             | 3000                       | 6.0                                             | 0.03                                 | 0.2     | 4,7                         | Q,O                      |

\*Measured without cover window

Q = Quartz window

O = Open frame (ceramic versions only).

U = UV transmitting glass (metal package only).

For spectral response requirements to 190 nm use a Quartz Window

### ORDERING INFORMATION

When ordering use Centronic type number. Please add suffix C if ceramic package is required.  
Please add suffix Q, U or O to define the window type required.

### EXAMPLE:

CERAMIC STYLE  
PACKAGE

OSD 35 - 7 CQ

Active  
area mm<sup>2</sup>

Ceramic  
package

Quartz  
window

METAL STYLE  
PACKAGE

OSD 35 - 7U

Active  
area mm<sup>2</sup>

UV glass

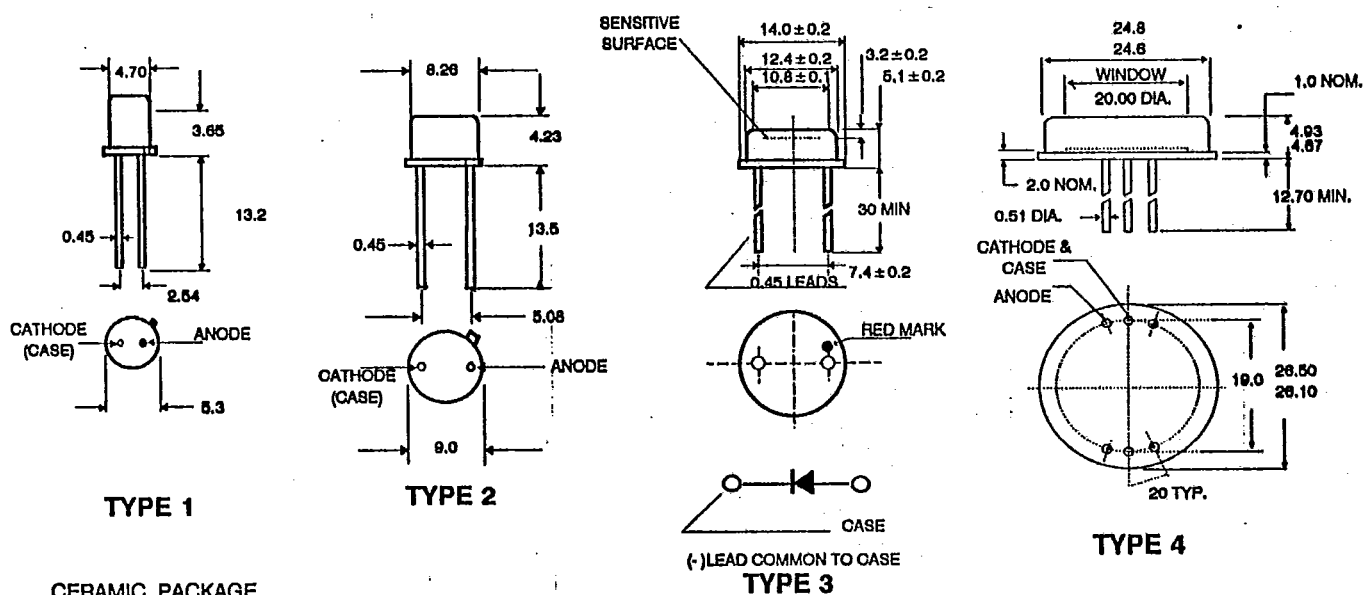
**CENTRONIC** INC.  
E-O Division

1829-B DeHavilland Dr. • Newbury Park, California 91320-1702 • (805) 499-5902 • FAX: (805) 499-7770

9-17-91  
**Morgan**  
ELECTRONICS DIVISION

**ABSOLUTE MAXIMUM RATINGS**

|                                                   | Max Rating  | Unit     |
|---------------------------------------------------|-------------|----------|
| DC Reverse Voltage                                | 5           | V        |
| Peak pulse current (1us, 1% duty cycle)           | 200         | mA       |
| Peak DC current                                   | 10          | mA       |
| Storage temperature range                         | -55 to +125 | degree C |
| Operating temperature range                       | -55 to +70  | degree C |
| Soldering temperature (2mm from the case for 100) | 260         | degree C |

**METAL PACKAGE****CERAMIC PACKAGE**