

# Mechanical Drawings

Mechanical Specifications and Die Topography

## 1. Parameter Definitions:

A = Distance from top of chip to top of glass.

a = Photodiode Anode.

B = Distance from top of glass to bottom of case.

c = Photodiode Cathode

(Note: cathode is common to case in metal package products unless otherwise noted).

W = Window Diameter.

F.O.V. = Filed of View (see definition below).

## 2. Dimensions are in inches (1 inch = 25.4 mm).

## 3. Pin diameters are $0.018 \pm 0.002$ " unless otherwise specified.

## 4. Tolerances (unless otherwise noted)

General:  $0.XX \pm 0.01$ "

$0.XXX \pm 0.005$ "

Chip Centering:  $\pm 0.010$ "

Dimension 'A':  $\pm 0.015$ "

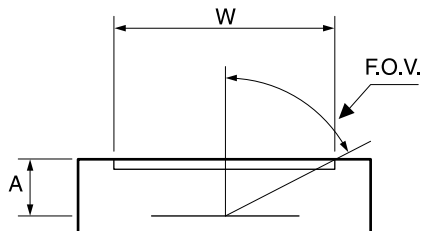
## 5. Windows

All '**UV**' Enhanced products are provided with QUARTZ glass windows,  $0.027 \pm 0.002$ " thick.

All '**XUV**' products are provided with removable windows.

All '**DLS**' PSD products are provided with A/R coated glass windows.

All '**FIL**' photoconductive and photovoltaic products are epoxy filled instead of glass windows.



$$F.O.V. = \tan^{-1} \left( \frac{W}{2A} \right)$$

**OSI** Optoelectronics  
An OSI Systems Company

 SphereOptics

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[www.sphereoptics.de](http://www.sphereoptics.de)

# Mechanical Specifications

All units in inches. Pinouts are bottom view.

1 TO-18				2 TO-5				3 TO-8																																			
Products:				Products:				Products:																																			
<b>PIN-020A</b> <b>PIN-040A</b> <b>PIN-040-DP/SB</b>				<b>PIN-5DI</b> <b>PIN-5DPI</b> <b>PIN-13DI</b> <b>PIN-13DPI</b> <b>PIN-5-YAG</b> <b>CD-25T</b>				<b>PIN-6DI</b> <b>PIN-6DPI</b> <b>PIN-44DI</b> <b>PIN-44DPI</b> <b>APD50-8-150-TO8</b>																																			
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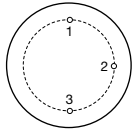
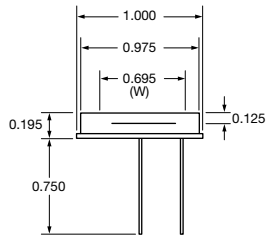
4 TO-18				5 TO-5				6 TO-8																																					
Products:				Products:				Products:																																					
<b>PIN-2DI</b> <b>PIN-2DPI</b> <b>PIN-3CDI</b> <b>PIN-3CDPI</b>				<b>PIN-5D</b> <b>PIN-5DP</b> <b>PIN-5DP/SB</b> <b>PIN-13D</b> <b>PIN-13DP</b> <b>PIN-005E-550F</b>  <b>UV-001</b> <b>UV-005</b> <b>UV-005DQ</b> <b>UV-005EQ</b> <b>UV-013DQ</b> <b>UV-013EQ</b> <b>UV-015</b>				<b>PIN-6D</b> <b>PIN-6DP</b> <b>PIN-44D</b> <b>PIN-44DP</b> <b>UV-020</b> <b>UV-035DQ</b> <b>UV-035EQ</b> <b>UV-035</b>																																					
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7 TO-18				8 TO-18				9 TO-18																																				
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<b>PIN-3CD</b> <b>PIN-3CDP</b> <b>BPX-65</b> <b>OSD1-0</b> <b>OSD1-5T</b> <b>OSD3-5T</b> <b>OSD1-E</b> <b>OSD3-E</b>				<b>PIN-125DPL</b>				<b>PIN-HR005</b> <b>PIN-HR008</b> <b>PIN-HR020</b> <b>PIN-HR026</b> <b>PIN-HR040</b>																																				
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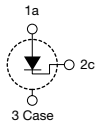
# Mechanical Specifications

All units in inches. Pinouts are bottom view.

## 10 Low Profile



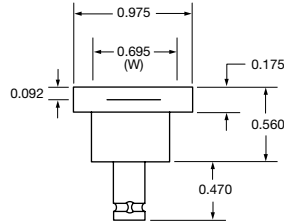
Pin Circle Dia.=0.73



### Products:

PIN-10DI  
PIN-10DPI  
PIN-10DPI/SB  
UV-50L  
UV-100L

## 11 BNC

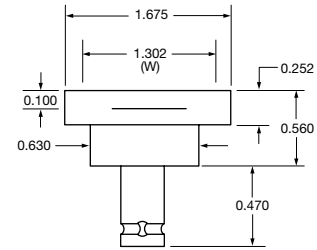


Outer Contact — Anode	PIN-10D, PIN-10DP, PIN-10DP/SB UV-100DQ, UV-100EQ
Outer Contact — Cathode	UV-50, UV-100

### Products:

PIN-10D  
PIN-10DP  
PIN-10DP/SB  
UV-50  
UV-100  
UV-100DQ  
UV-100EQ

## 12 BNC

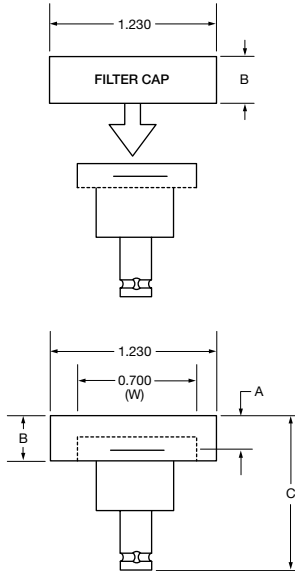


Outer Contact — Anode

### Products:

PIN-25D  
PIN-25DP

## 13 Special BNC

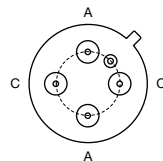
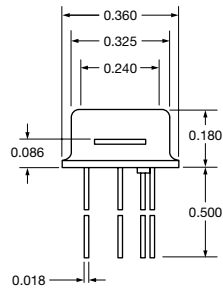


Dimensions			
P/N	A	B	C
PIN-10DF	0.217	0.330	1.020
PIN-10AP	0.386	0.550	1.415

### Products:

PIN-10AP  
PIN-10DF

## 14 TO-5

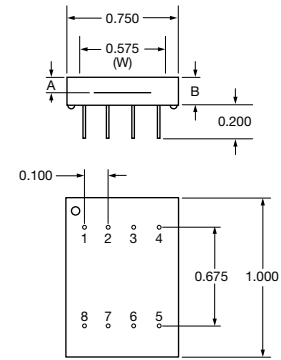


Pin Circle Dia.= 0.200  
Bottom View

### Products:

DLS-2S

## 15 Special Plastic



### Dimensions

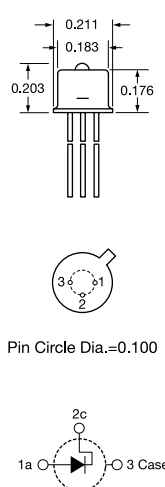
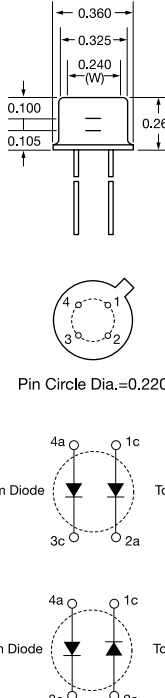
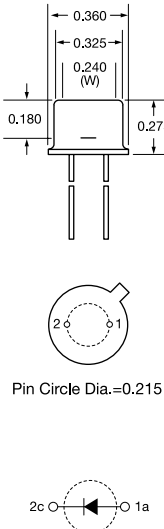
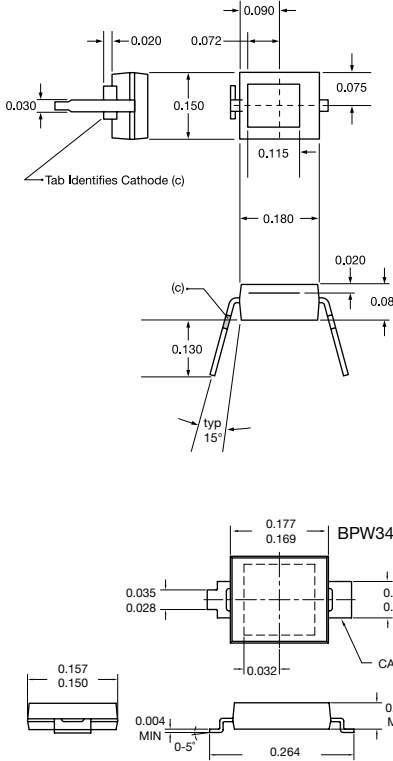
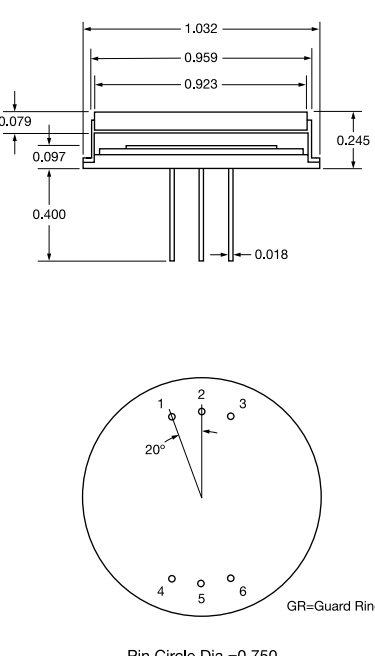
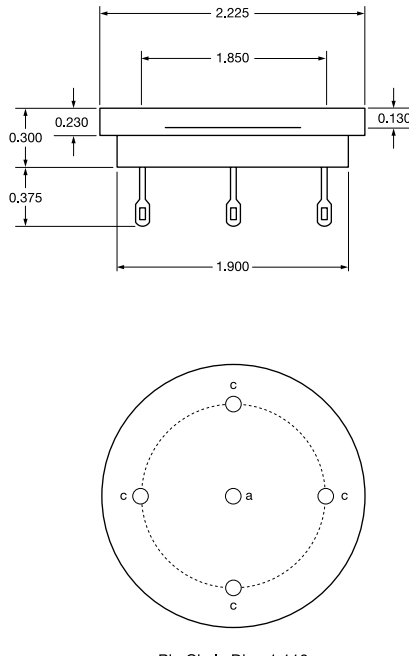
P/N	A	B
FIL-UV50	0.090	0.155

### Pinouts

P/N	1	2	3	4	5	6	7	8
FIL-UV50	c	-	-	a	c	-	-	a

# Mechanical Specifications

All units in inches. Pinouts are bottom view.

16 TO-18 Lensed Cap	17 TO-5	18 TO-5																																			
<p><b>Products:</b> PIN-HR005L PIN-HR008L PIN-HR020L PIN-HR026L PIN-HR040L</p>  <p>Pin Circle Dia.=0.100</p>	<p><b>Products:</b> PIN-DSS PIN-DSIn</p>  <p>Pin Circle Dia.=0.220</p>	<p><b>Products:</b> PIN-005D-245F</p>  <p>Pin Circle Dia.=0.215</p>																																			
19 Plastic Mold	20 Special Metal	21 Special Metal																																			
<p><b>Products:</b> BPW34 BPW34B BPW34S</p>  <p>Tab Identifies Cathode (c)</p> <p>BPW34S 0.177, 0.169, 0.035, 0.028, 0.032, 0.067, 0.059, 0.157, 0.150, 0.004 MIN, 0-5°, 0.264, 0.240, 0.047 MAX</p>	<p><b>Products:</b> SPOT-15-YAG SPOT-9-YAG PIN-100-YAG</p>  <p>GR=Guard Ring</p> <p>Pin Circle Dia.=0.750</p> <table border="1" data-bbox="584 1848 1023 1953"> <thead> <tr> <th colspan="7">Pinouts</th> </tr> <tr> <th>P/N</th> <th>1</th> <th>2</th> <th>3</th> <th>4</th> <th>5</th> <th>6</th> </tr> </thead> <tbody> <tr> <td>SPOT-15-YAG</td> <td>C1</td> <td>GR</td> <td>C4</td> <td>C2</td> <td>A</td> <td>C3</td> </tr> <tr> <td>SPOT-9-YAG</td> <td>C1</td> <td>GR</td> <td>C4</td> <td>C2</td> <td>A</td> <td>C3</td> </tr> <tr> <td>PIN-100-YAG</td> <td>--</td> <td>C</td> <td>--</td> <td>--</td> <td>A</td> <td>--</td> </tr> </tbody> </table>	Pinouts							P/N	1	2	3	4	5	6	SPOT-15-YAG	C1	GR	C4	C2	A	C3	SPOT-9-YAG	C1	GR	C4	C2	A	C3	PIN-100-YAG	--	C	--	--	A	--	<p><b>Products:</b> SC-50D</p>  <p>Pin Circle Dia.=1.110</p>
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PIN-100-YAG	--	C	--	--	A	--																															

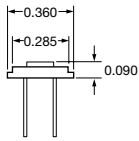
# Mechanical Specifications

All units in inches. Pinouts are bottom view.

## 22 TO-5

Products:

XUV-005



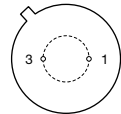
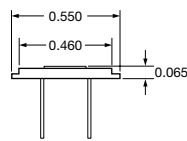
Pin Circle Dia.=0.200



## 23 TO-8

Products:

XUV-020  
XUV-035



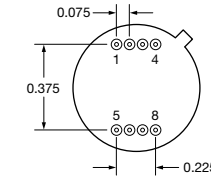
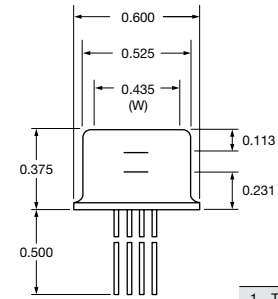
Pin Circle Dia.=0.295



## 24 TO-8

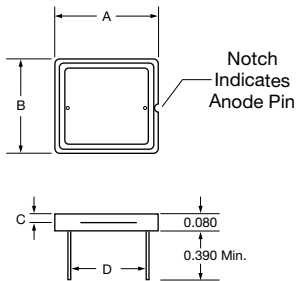
Products:

PIN-DSIn-TEC



Pinout	
1	TEC (-)
2	Thermistor
3	Thermistor
4	TEC (+)
5	Top Silicon, Cathode
6	Top Silicon, Anode
7	Bottom InGaAs, Anode
8	Bottom InGaAs, Cathode

## 25 Special Ceramic / Plastic



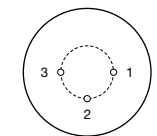
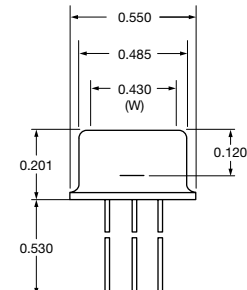
P/N	Dimensions			
	A	B	C	D
UV-005EQC	0.300	0.236	0.024	0.177
UV-035EQC	0.400	0.350	0.028	0.290
UV-100EQC	0.650	0.590	0.028	0.490
UV-005DQC	0.300	0.236	0.035	0.177
UV-035DQC	0.400	0.350	0.039	0.290
UV-100DQC	0.650	0.590	0.039	0.490
XUV-50C	0.650	0.590	0.027	0.490
XUV-100C	0.650	0.590	0.027	0.490
RD-100	0.650	0.590	0.027	0.490
RD-100A	0.650	0.590	0.027	0.490
UV-35P	0.390	0.345	0.050	0.275
OSD35-LR-A	0.390	0.350	---	0.290
OSD35-LR-D	0.390	0.350	---	0.290

Note: OSD35-prefix packages come with 0.31" (min.) leads

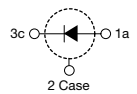
## 26 TO-8

Products:

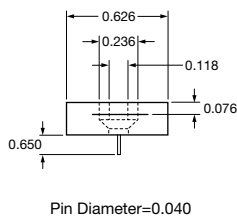
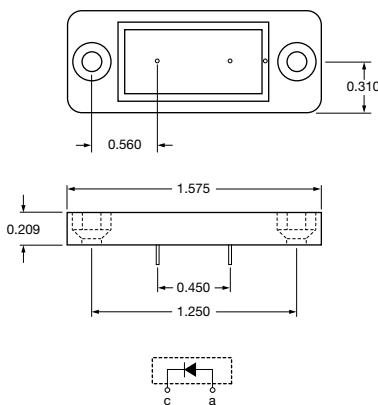
RD-100  
RD-100A  
UV-35P  
UV-005EQC  
UV-035EQC  
UV-100EQC  
UV-005DQC  
UV-035DQC  
UV-100DQC  
XUV-50C  
XUV-100C  
OSD35-LR-A  
OSD35-LR-D



Pin Circle Dia.=0.295



## 27 Special Plastic



Pin Diameter=0.040



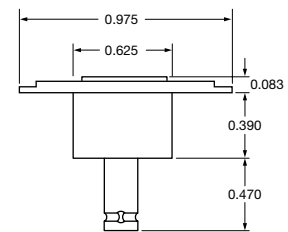
## 28 BNC

Products:

PIN-220D  
PIN-220DP  
PIN-220DP/SB

Products:

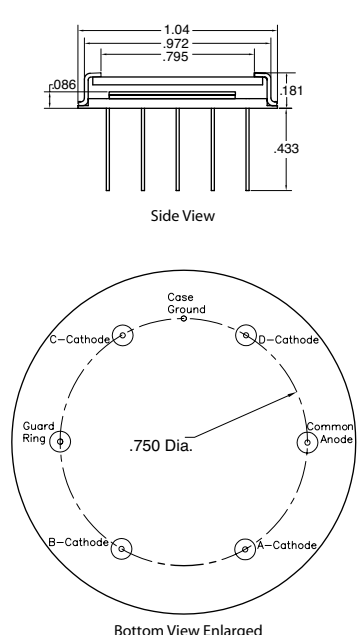
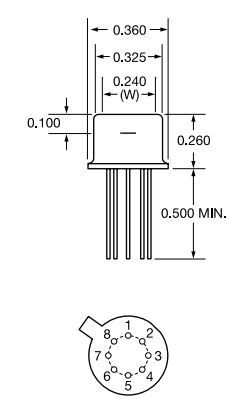
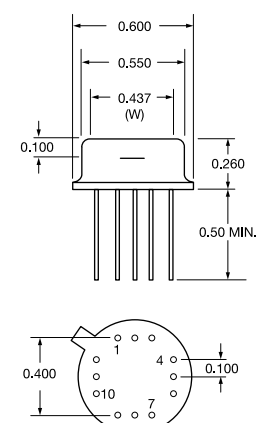
XUV-100

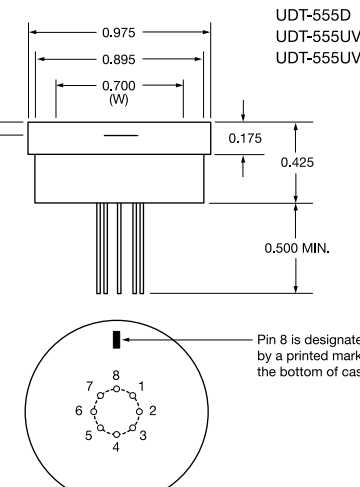
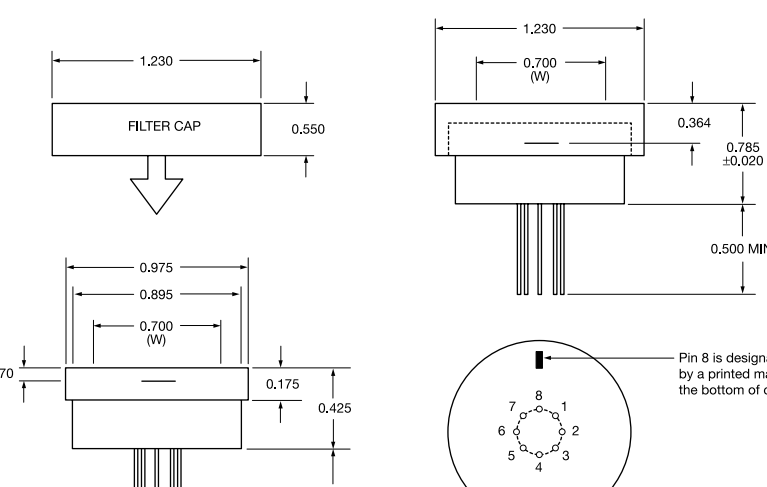


BNC Connector  
Outer Contact = Cathode

# Mechanical Specifications

All units in inches. Pinouts are bottom view.

29 Metal	30 TO-5	31 TO-8																																												
<p><b>Products:</b> SPOT-13-YAG-FL SPOT-11-YAG-FL</p>  <p>Side View</p> <p>Bottom View Enlarged</p>	<p><b>Products:</b> UDT-455 UDT-455UV OSI-515</p>  <p>Pin Circle Dia.=0.23</p> <table border="1"> <thead> <tr> <th colspan="2">Pinout</th> </tr> </thead> <tbody> <tr><td>1</td><td>Offset Null</td></tr> <tr><td>2</td><td>Inverting Input Detector Cathode</td></tr> <tr><td>3</td><td>Noninverting Input</td></tr> <tr><td>4</td><td>V (-)</td></tr> <tr><td>5</td><td>Offset Null</td></tr> <tr><td>6</td><td>Output</td></tr> <tr><td>7</td><td>V (+)</td></tr> <tr><td>8</td><td>Detector Anode</td></tr> </tbody> </table> <p>OSI-515 pin 1 &amp; 5 are N/C</p>	Pinout		1	Offset Null	2	Inverting Input Detector Cathode	3	Noninverting Input	4	V (-)	5	Offset Null	6	Output	7	V (+)	8	Detector Anode	<p><b>Products:</b> UDT-020D PIN-020UV</p>  <p>Pin Circle Dia.=0.295</p> <table border="1"> <thead> <tr> <th>UDT-020D Pinout</th> <th>PIN-020UV</th> </tr> </thead> <tbody> <tr><td>1</td><td>Not Used</td></tr> <tr><td>2</td><td>Not Used</td></tr> <tr><td>3</td><td>Not Used</td></tr> <tr><td>4</td><td>Not Used</td></tr> <tr><td>5</td><td>Inverting Input</td></tr> <tr><td>6</td><td>Noninverting Input</td></tr> <tr><td>7</td><td>Detector Cathode</td></tr> <tr><td>8</td><td>Case Ground</td></tr> <tr><td>9</td><td>Detector Anode</td></tr> <tr><td>10</td><td>V (-)</td></tr> <tr><td>11</td><td>Output</td></tr> <tr><td>12</td><td>V (+)</td></tr> </tbody> </table>	UDT-020D Pinout	PIN-020UV	1	Not Used	2	Not Used	3	Not Used	4	Not Used	5	Inverting Input	6	Noninverting Input	7	Detector Cathode	8	Case Ground	9	Detector Anode	10	V (-)	11	Output	12	V (+)
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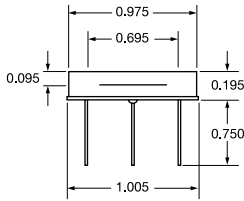
32 Special	33 Special																																				
<p><b>Products:</b> UDT-055UV UDT-555D UDT-555UV UDT-555UV/LN</p>  <p>Pin Circle Dia.=0.230</p> <table border="1"> <thead> <tr> <th colspan="2">Pinout</th> </tr> </thead> <tbody> <tr><td>1</td><td>Offset Null</td></tr> <tr><td>2</td><td>Inverting Input Detector Cathode</td></tr> <tr><td>3</td><td>Noninverting Input</td></tr> <tr><td>4</td><td>V (-)</td></tr> <tr><td>5</td><td>Offset Null</td></tr> <tr><td>6</td><td>Output</td></tr> <tr><td>7</td><td>V (+)</td></tr> <tr><td>8</td><td>Detector Anode and Case</td></tr> </tbody> </table>	Pinout		1	Offset Null	2	Inverting Input Detector Cathode	3	Noninverting Input	4	V (-)	5	Offset Null	6	Output	7	V (+)	8	Detector Anode and Case	<p><b>Products:</b> PIN-555AP</p>  <p>Pin Circle Dia.=0.230</p> <table border="1"> <thead> <tr> <th colspan="2">Pinout</th> </tr> </thead> <tbody> <tr><td>1</td><td>Offset Null</td></tr> <tr><td>2</td><td>Inverting Input Detector Cathode</td></tr> <tr><td>3</td><td>Noninverting Input</td></tr> <tr><td>4</td><td>V (-)</td></tr> <tr><td>5</td><td>Offset Null</td></tr> <tr><td>6</td><td>Output</td></tr> <tr><td>7</td><td>V (+)</td></tr> <tr><td>8</td><td>Detector Anode and Case</td></tr> </tbody> </table>	Pinout		1	Offset Null	2	Inverting Input Detector Cathode	3	Noninverting Input	4	V (-)	5	Offset Null	6	Output	7	V (+)	8	Detector Anode and Case
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# Mechanical Specifications

All units in inches. Pinouts are bottom view.

## 34 Special

Products:  
DL-10

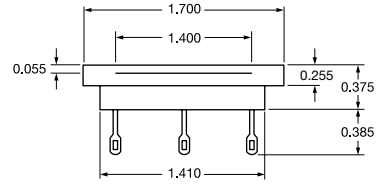


Pin Circle Dia.=0.730  
Bottom View

Anode contacts are on the top of the detector.

## 35 Special

Products:  
DL-20

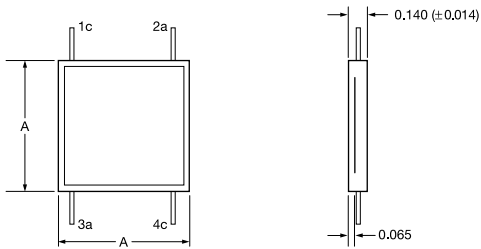


Pin Dia.=0.040  
Pin Circle Dia.=1.110  
Bottom View

Anode contacts are on the top of the detector.

## 36 Special Ceramic

Products:  
DLS-10  
DLS-20

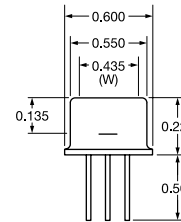


Pin Dia.=0.028 Typ.  
Pin Length.=0.250 Typ.

P/N	A
DLS-10	1,000
DLS-20	1,500

## 37 TO-8

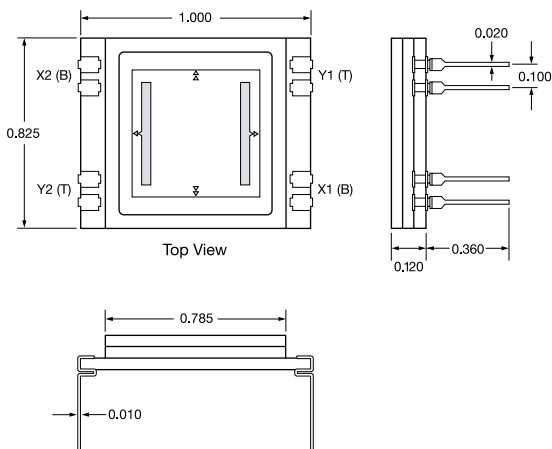
Products:  
DL-2  
DLS-2  
DL-4  
DLS-4



Pin Circle Dia.=0.400  
Bottom View

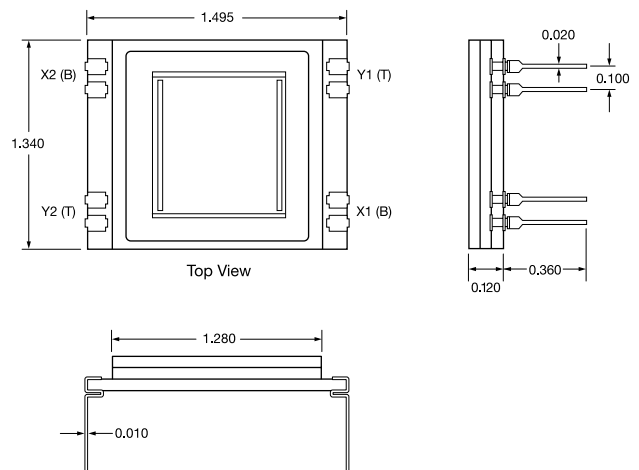
## 38 Low Cost Ceramic

Products:  
DL-10C



## 39 Low Cost Ceramic

Products:  
DL-20C



# Mechanical Specifications

All units in inches. Pinouts are bottom view.

40 TO-18	41 TO-5	42 TO-8																																																																																										
<p><b>Products:</b> SPOT-2DMI</p> <p>Pin Circle Dia.=0.100</p>	<p><b>Products:</b> SC-4D SL3-1 SPOT-2D SPOT-3D SPOT-4D SPOT-4DMI QD7-0</p> <p>Pin Circle Dia.=0.200</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <caption>Dimensions</caption> <thead> <tr> <th>P/N</th> <th>A</th> <th>B</th> <th>W</th> </tr> </thead> <tbody> <tr><td>SC-4D</td><td>0.071</td><td>0.142</td><td>0.240</td></tr> <tr><td>SL3-1</td><td>0.106</td><td>0.195</td><td>0.217</td></tr> <tr><td>SPOT-2D</td><td>0.063</td><td>0.114</td><td>0.240</td></tr> <tr><td>SPOT-3D</td><td>0.104</td><td>0.138</td><td>0.240</td></tr> <tr><td>SPOT-4D</td><td>0.063</td><td>0.142</td><td>0.240</td></tr> <tr><td>SPOT-4DMI</td><td>0.063</td><td>0.142</td><td>0.240</td></tr> <tr><td>SPOT-4DUV</td><td>0.063</td><td>0.142</td><td>0.240</td></tr> <tr><td>QD7-0</td><td>0.050</td><td>0.130</td><td>0.230</td></tr> </tbody> </table> <table border="1" style="margin-left: auto; margin-right: auto;"> <caption>Pinouts</caption> <thead> <tr> <th>P/N</th> <th>1</th> <th>2</th> <th>3</th> <th>4</th> <th>5</th> </tr> </thead> <tbody> <tr><td>SC-4D</td><td>c</td><td>c</td><td>c</td><td>c</td><td>a</td></tr> <tr><td>SL3-1</td><td>a</td><td>c</td><td>a</td><td>--</td><td>--</td></tr> <tr><td>SPOT-2D</td><td>a</td><td>c</td><td>a</td><td>--</td><td>--</td></tr> <tr><td>SPOT-3D</td><td>a</td><td>c</td><td>a</td><td>--</td><td>--</td></tr> <tr><td>SPOT-4D</td><td>a</td><td>a</td><td>a</td><td>a</td><td>c</td></tr> <tr><td>SPOT-4DMI</td><td>a</td><td>a</td><td>a</td><td>a</td><td>c</td></tr> <tr><td>SPOT-4DUV</td><td>a</td><td>a</td><td>a</td><td>a</td><td>c</td></tr> <tr><td>QD7-0</td><td>a</td><td>a</td><td>a</td><td>a</td><td>c</td></tr> </tbody> </table>	P/N	A	B	W	SC-4D	0.071	0.142	0.240	SL3-1	0.106	0.195	0.217	SPOT-2D	0.063	0.114	0.240	SPOT-3D	0.104	0.138	0.240	SPOT-4D	0.063	0.142	0.240	SPOT-4DMI	0.063	0.142	0.240	SPOT-4DUV	0.063	0.142	0.240	QD7-0	0.050	0.130	0.230	P/N	1	2	3	4	5	SC-4D	c	c	c	c	a	SL3-1	a	c	a	--	--	SPOT-2D	a	c	a	--	--	SPOT-3D	a	c	a	--	--	SPOT-4D	a	a	a	a	c	SPOT-4DMI	a	a	a	a	c	SPOT-4DUV	a	a	a	a	c	QD7-0	a	a	a	a	c	<p><b>Products:</b> SL5-1</p> <p>Pin Circle Dia.=0.300</p>
P/N	A	B	W																																																																																									
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SPOT-4DUV	a	a	a	a	c																																																																																							
QD7-0	a	a	a	a	c																																																																																							

43 Low Profile	44 Special	45 Special
<p><b>Products:</b> SPOT-9D SPOT-9DMI</p> <p>Pin Circle Dia.=0.730</p>	<p><b>Products:</b> SC-10D</p> <p>Pin Circle Dia.=0.730</p>	<p><b>Products:</b> SC-25D</p> <p>Pin Circle Dia.=0.950</p>

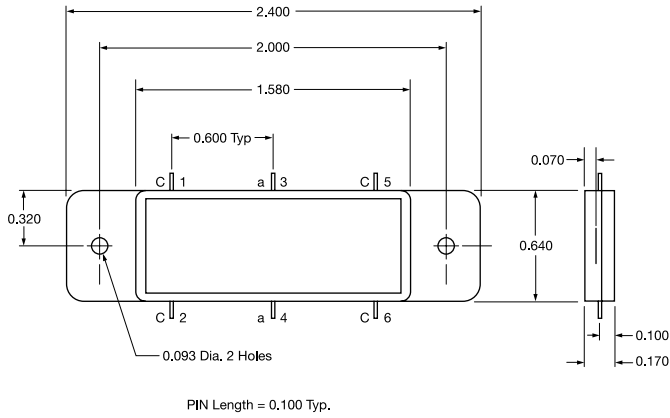


# Mechanical Specifications

All units in inches.

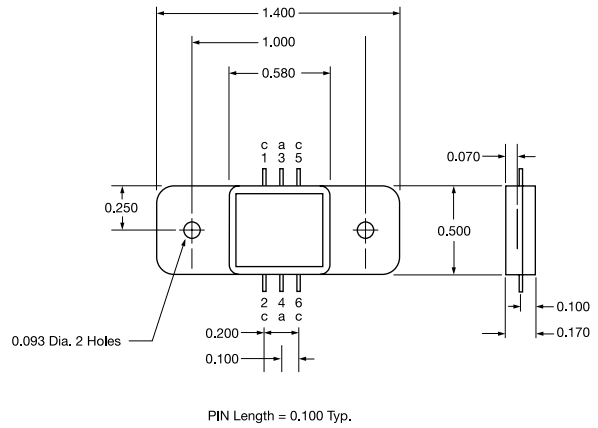
## 46 Plastic

Products:  
LSC-30D



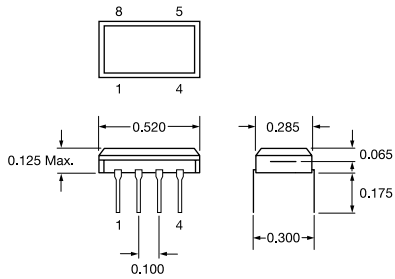
## 47 Plastic

Products:  
LSC-5D



## 48 8-PIN DIP

Products:  
SL3-2  
SL5-2

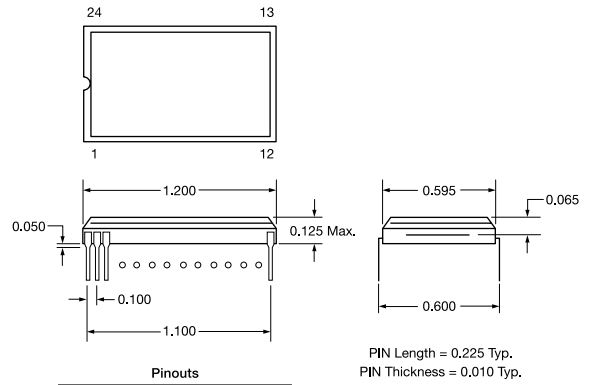


**Pinouts**

2, 7	Anode 1
1, 4, 5, 8	Common Cathode
3, 6	Anode 2

## 49 24-PIN DIP

Products:  
SL-15

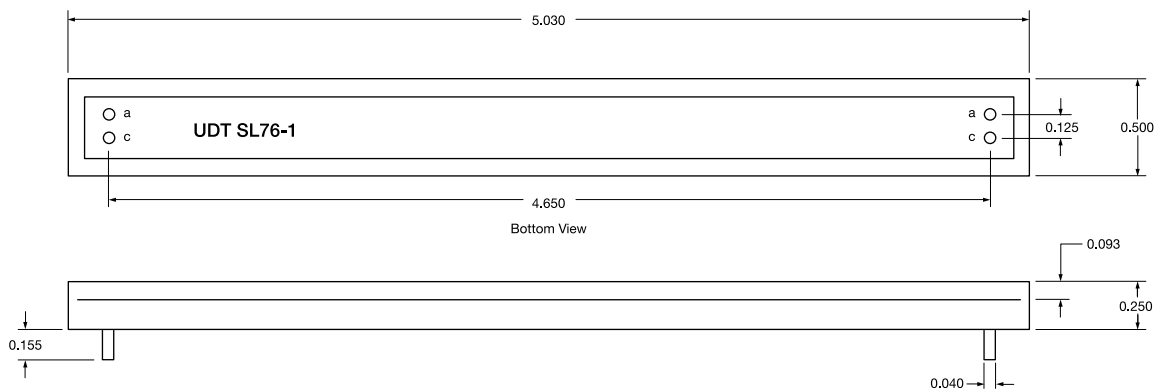


**Pinouts**

11	Anode 1
12, 24	Common Cathode
23	Anode 2
All Other Pins NOT CONNECTED	

## 50 Special

Products:  
SL76-1



# Mechanical Specifications

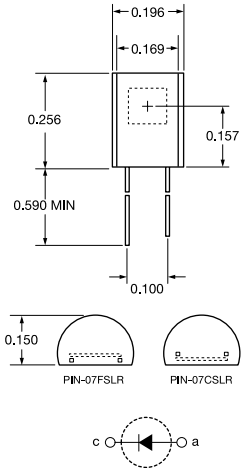
All units in inches. Pinouts are bottom view.

51 Low Cost Ceramic	52 Special	53 Special														
<p><b>Products:</b> SL-30</p>	<p><b>Products:</b> A2V-76</p>	<p><b>Products:</b> A2V-16</p> <table border="1"> <caption>Dimensions</caption> <thead> <tr> <th>P/N</th> <th>A</th> <th>B</th> <th>C</th> <th>D</th> <th>E</th> <th>F</th> </tr> </thead> <tbody> <tr> <td>A2V-16</td> <td>1</td> <td>0.1</td> <td>0.212</td> <td>0.2</td> <td>0.062</td> <td>0.06</td> </tr> </tbody> </table>	P/N	A	B	C	D	E	F	A2V-16	1	0.1	0.212	0.2	0.062	0.06
P/N	A	B	C	D	E	F										
A2V-16	1	0.1	0.212	0.2	0.062	0.06										

54 40-PIN-DIP	55 Special																																																																																																																																																																								
<p><b>Products:</b> A5V-35UV A5C-35, A5C-38 A5V-35, A5V-38</p> <table border="1"> <caption>35 Element Array</caption> <thead> <tr> <th>Pin Number</th> <th>Element Number</th> <th>Pin Number</th> <th>Element Number</th> </tr> </thead> <tbody> <tr><td>1</td><td>C</td><td>21</td><td>C</td></tr> <tr><td>2</td><td>2</td><td>22</td><td>35</td></tr> <tr><td>3</td><td>4</td><td>23</td><td>33</td></tr> <tr><td>4</td><td>6</td><td>24</td><td>31</td></tr> <tr><td>5</td><td>8</td><td>25</td><td>29</td></tr> <tr><td>6</td><td>10</td><td>26</td><td>27</td></tr> <tr><td>7</td><td>12</td><td>27</td><td>25</td></tr> <tr><td>8</td><td>14</td><td>28</td><td>23</td></tr> <tr><td>9</td><td>16</td><td>29</td><td>21</td></tr> <tr><td>10</td><td>18</td><td>30</td><td>19</td></tr> <tr><td>11</td><td>--</td><td>31</td><td>17</td></tr> <tr><td>12</td><td>20</td><td>32</td><td>15</td></tr> <tr><td>13</td><td>22</td><td>33</td><td>13</td></tr> <tr><td>14</td><td>24</td><td>34</td><td>11</td></tr> <tr><td>15</td><td>26</td><td>35</td><td>9</td></tr> <tr><td>16</td><td>28</td><td>36</td><td>7</td></tr> <tr><td>17</td><td>30</td><td>37</td><td>5</td></tr> <tr><td>18</td><td>32</td><td>38</td><td>3</td></tr> <tr><td>19</td><td>34</td><td>39</td><td>1</td></tr> <tr><td>20</td><td>C</td><td>40</td><td>C</td></tr> </tbody> </table> <table border="1"> <caption>38 Element Array</caption> <thead> <tr> <th>Pin Number</th> <th>Element Number</th> <th>Pin Number</th> <th>Element Number</th> </tr> </thead> <tbody> <tr><td>1</td><td>C</td><td>21</td><td>C</td></tr> <tr><td>2</td><td>2</td><td>22</td><td>37</td></tr> <tr><td>3</td><td>4</td><td>23</td><td>35</td></tr> <tr><td>4</td><td>6</td><td>24</td><td>33</td></tr> <tr><td>5</td><td>8</td><td>25</td><td>31</td></tr> <tr><td>6</td><td>10</td><td>26</td><td>29</td></tr> <tr><td>7</td><td>12</td><td>27</td><td>27</td></tr> <tr><td>8</td><td>14</td><td>28</td><td>25</td></tr> <tr><td>9</td><td>16</td><td>29</td><td>23</td></tr> <tr><td>10</td><td>18</td><td>30</td><td>21</td></tr> <tr><td>11</td><td>20</td><td>31</td><td>19</td></tr> <tr><td>12</td><td>22</td><td>32</td><td>17</td></tr> <tr><td>13</td><td>24</td><td>33</td><td>15</td></tr> <tr><td>14</td><td>26</td><td>34</td><td>13</td></tr> <tr><td>15</td><td>28</td><td>35</td><td>11</td></tr> <tr><td>16</td><td>30</td><td>36</td><td>9</td></tr> <tr><td>17</td><td>32</td><td>37</td><td>7</td></tr> <tr><td>18</td><td>34</td><td>38</td><td>5</td></tr> <tr><td>19</td><td>36</td><td>39</td><td>3</td></tr> <tr><td>20</td><td>38</td><td>40</td><td>1</td></tr> </tbody> </table>	Pin Number	Element Number	Pin Number	Element Number	1	C	21	C	2	2	22	35	3	4	23	33	4	6	24	31	5	8	25	29	6	10	26	27	7	12	27	25	8	14	28	23	9	16	29	21	10	18	30	19	11	--	31	17	12	20	32	15	13	22	33	13	14	24	34	11	15	26	35	9	16	28	36	7	17	30	37	5	18	32	38	3	19	34	39	1	20	C	40	C	Pin Number	Element Number	Pin Number	Element Number	1	C	21	C	2	2	22	37	3	4	23	35	4	6	24	33	5	8	25	31	6	10	26	29	7	12	27	27	8	14	28	25	9	16	29	23	10	18	30	21	11	20	31	19	12	22	32	17	13	24	33	15	14	26	34	13	15	28	35	11	16	30	36	9	17	32	37	7	18	34	38	5	19	36	39	3	20	38	40	1	<p><b>Products:</b> OSD100-0A OSD100-5TA</p> <p>RED DOT INDICATES CATHODE LEAD</p>
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16	28	36	7																																																																																																																																																																						
17	30	37	5																																																																																																																																																																						
18	32	38	3																																																																																																																																																																						
19	34	39	1																																																																																																																																																																						
20	C	40	C																																																																																																																																																																						
Pin Number	Element Number	Pin Number	Element Number																																																																																																																																																																						
1	C	21	C																																																																																																																																																																						
2	2	22	37																																																																																																																																																																						
3	4	23	35																																																																																																																																																																						
4	6	24	33																																																																																																																																																																						
5	8	25	31																																																																																																																																																																						
6	10	26	29																																																																																																																																																																						
7	12	27	27																																																																																																																																																																						
8	14	28	25																																																																																																																																																																						
9	16	29	23																																																																																																																																																																						
10	18	30	21																																																																																																																																																																						
11	20	31	19																																																																																																																																																																						
12	22	32	17																																																																																																																																																																						
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14	26	34	13																																																																																																																																																																						
15	28	35	11																																																																																																																																																																						
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20	38	40	1																																																																																																																																																																						

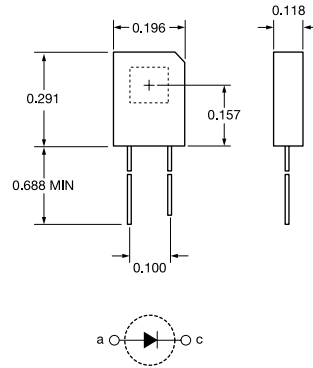
## 56 Lead Frame Molded

Products:  
PIN-07SLR  
PIN-07FSLR



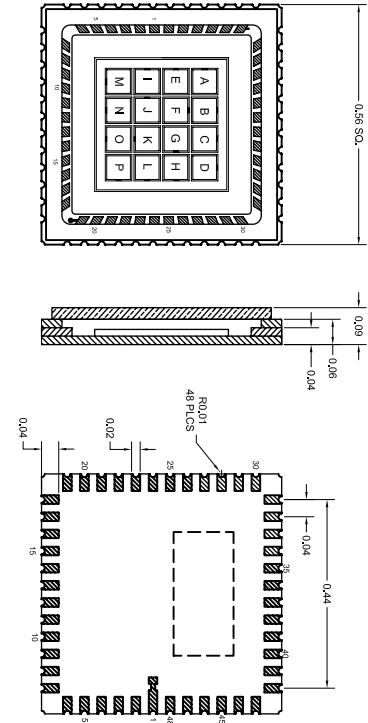
## 57 Lead Frame Molded

Products:  
PIN-07CSL  
PIN-07FSL



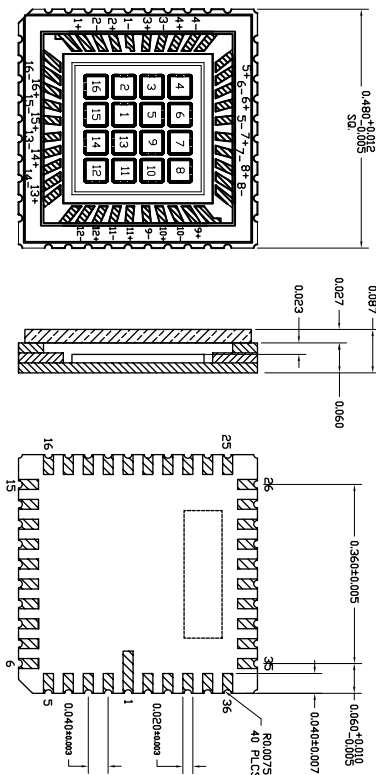
## 58 Ceramic LCC

Products:  
PIN-4X4D



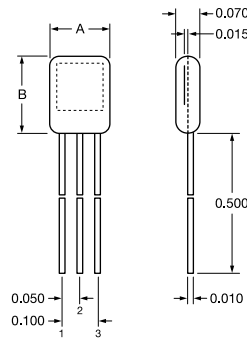
## 59 Ceramic LCC

Products:  
UDT-4X4D



## 60 Lead Frame Molded

Products:  
PIN-0.81-CSL  
PIN-4.0-CSL  
PIN-8.0-CSL  
PIN-08-CSL  
PIN-16-CSL  
PIN-08-CSL-F

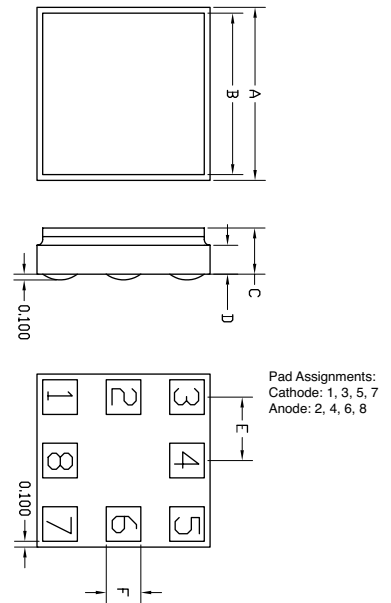


Dimensions

P/N	A	B
PIN-16CSL	0.215	0.264
All Others	0.170	0.220

## 61 SMT

Products:  
BI-SMT



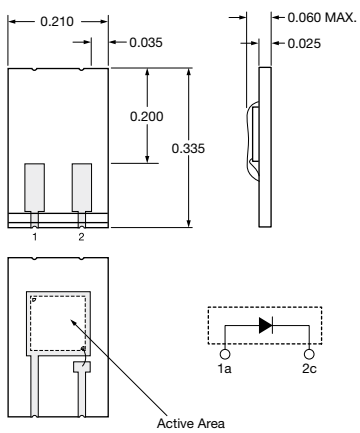
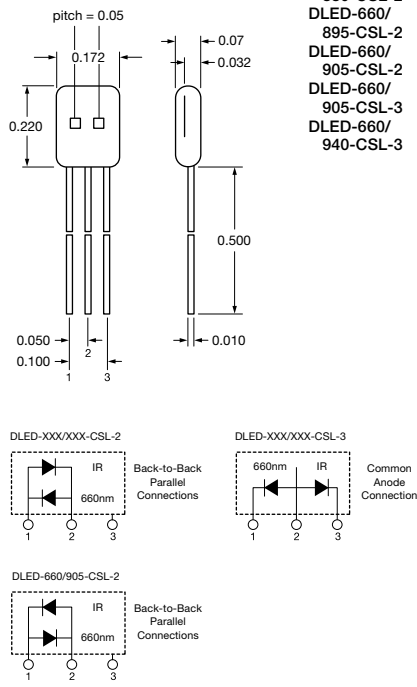
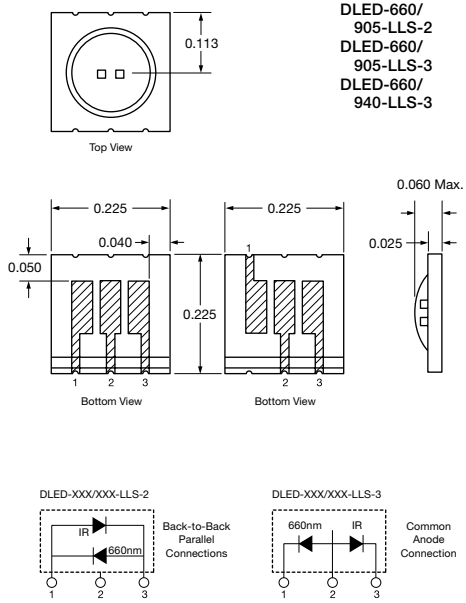
Pad Assignments:  
Cathode: 1, 3, 5, 7  
Anode: 2, 4, 6, 8

Dimensions in inches

Model Number	A	B	C	D	E	F
33BI-SMT	0.118	0.11	0.031	0.02	0.043	0.024
55BI-SMT	0.197	0.189	0.051	0.039	0.071	0.024
1010BI-SMT	0.394	0.386	0.051	0.039	0.163	0.059

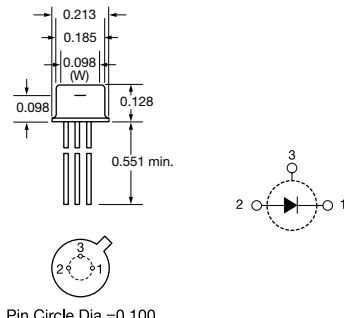
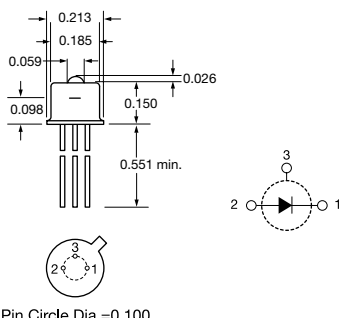
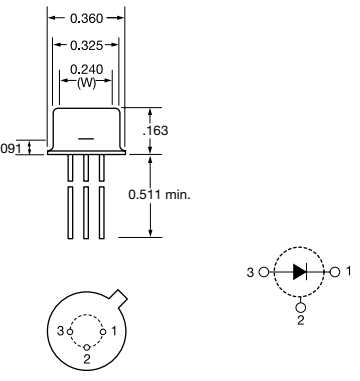
# Mechanical Specifications

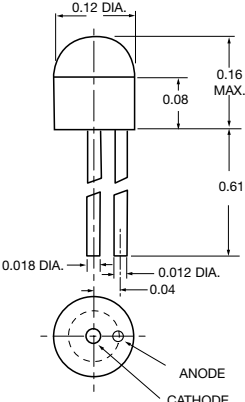
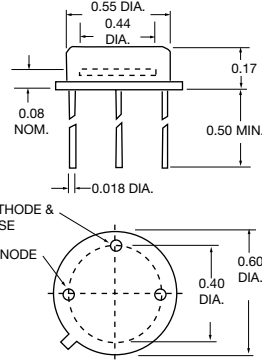
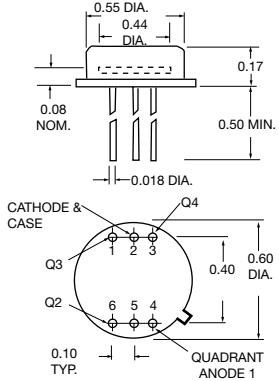
All units in inches.

62 Leadless Ceramic	63 Lead Frame Molded	64 Leadless Ceramic
<p><b>Products:</b> PIN-0.81-LLS PIN-4.0-LLS PIN-8.0-LLS</p>  <p>Active Area</p>	<p><b>Products:</b> DLED-660/ 880-CSL-2 DLED-660/ 895-CSL-2 DLED-660/ 905-CSL-2 DLED-660/ 905-CSL-3 DLED-660/ 940-CSL-3</p>  <p>pitch = 0.05</p> <p>Back-to-Back Parallel Connections</p> <p>Common Anode Connection</p>	<p><b>Products:</b> DLED-660/ 880-LLS-2 DLED-660/ 895-LLS-2 DLED-660/ 905-LLS-2 DLED-660/ 905-LLS-3 DLED-660/ 940-LLS-3</p>  <p>Top View</p> <p>Bottom View</p> <p>Bottom View</p> <p>Back-to-Back Parallel Connections</p> <p>Common Anode Connection</p>

# Mechanical Specifications

All units in inches. Pinouts are bottom view.

65 TO-52	66 TO-52L	67 TO-5
<p><b>Products:</b> APD02-8-150-T52 APD05-8-150-T52 APD10-8-150-T52</p>  <p>Pin Circle Dia.=0.100</p>	<p><b>Products:</b> APD02-8-150-T52L APD05-8-150-T52L APD10-8-150-T52L</p>  <p>Pin Circle Dia.=0.100</p>	<p><b>Products:</b> APD15-8-150-TO5 APD30-8-150-TO5</p>  <p>Pin Circle Dia.=0.200</p>

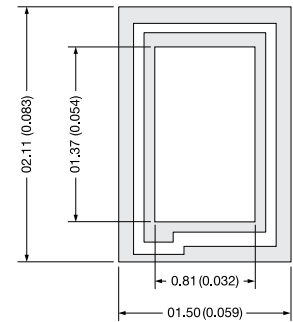
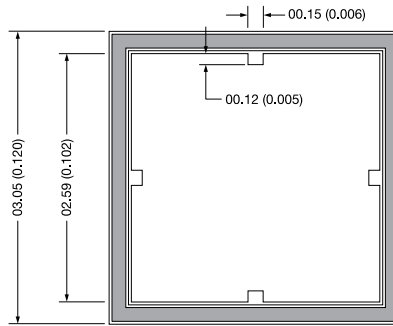
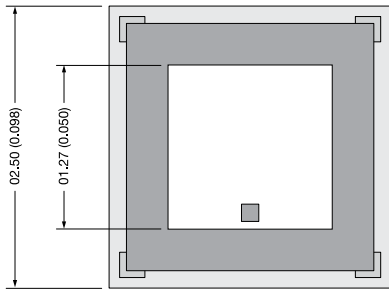
68 Plastic	69 TO-8	70 TO-8
<p><b>Products:</b> CD-1705</p>  <p>ANODE CATHODE</p>	<p><b>Products:</b> OSD60-0 OSD60-ST OSD60-E</p>  <p>CATHODE &amp; CASE ANODE</p>	<p><b>Products:</b> QD50-0</p>  <p>Q4 Q3 Q2 Q1 QUADRANT ANODE 1</p>

# Die Topography

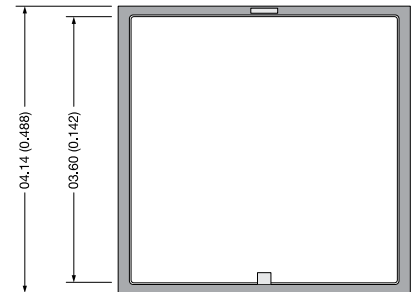
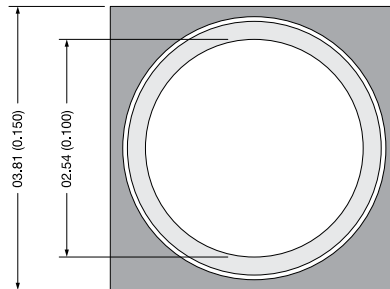
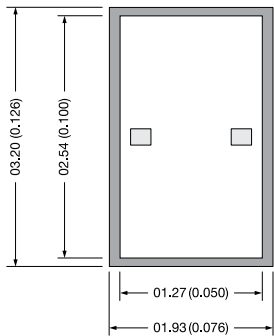
All chip dimension are in millimeters (inches in parentheses).

The following die topographies are for reference only. They shall not be used for any design purposes. Consult an Applications Engineer for further details and accurate dimensions.

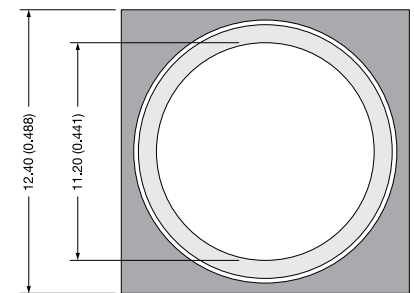
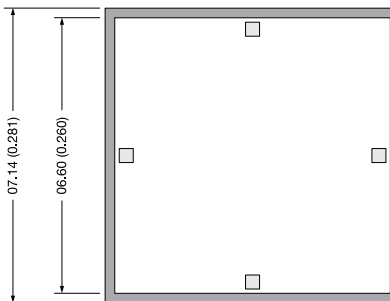
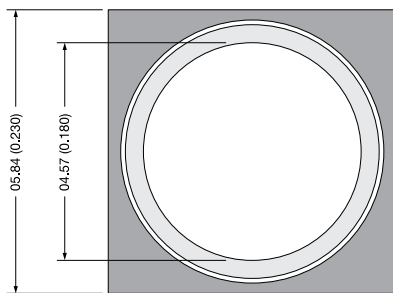
■ PIN-125DP / 125DPL
■ BPW-34
■ PIN-2DI / DPI



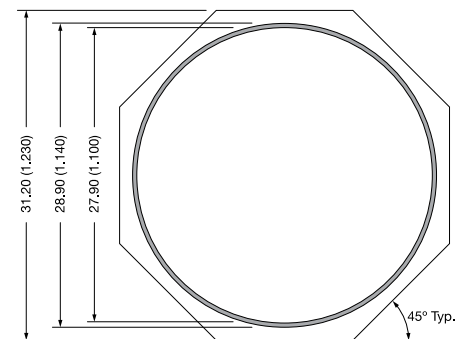
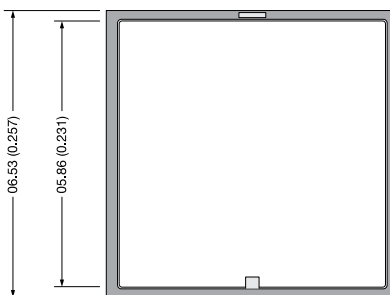
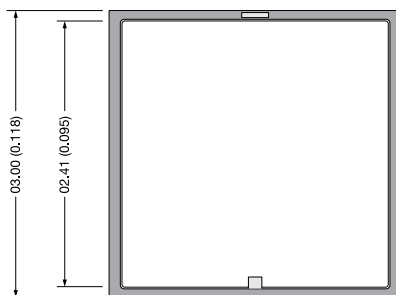
■ PIN-3CD / DP
■ PIN-5D / DP — UV-005
■ PIN-13D / DP — UV-013D / E



■ PIN-6D / DP
■ PIN-44D / DP
■ PIN-10D / DP



■ UV-005D / E
■ UV-035D / E
■ PIN-25DP



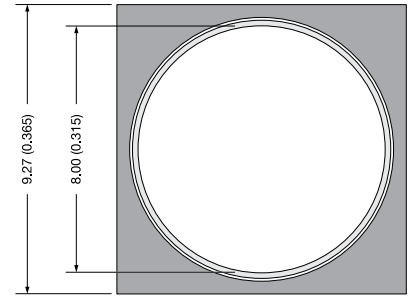
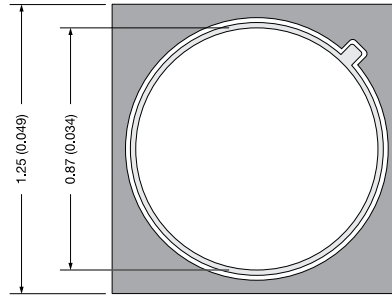
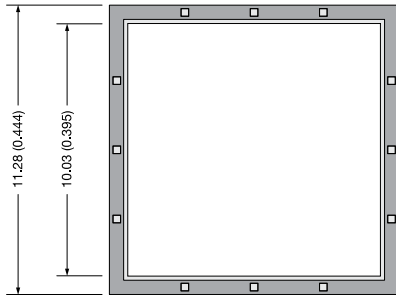
# Die Topography

All chip dimension are in millimeters (inches in parentheses).

**PIN-RD100(A)**

**UV-001**

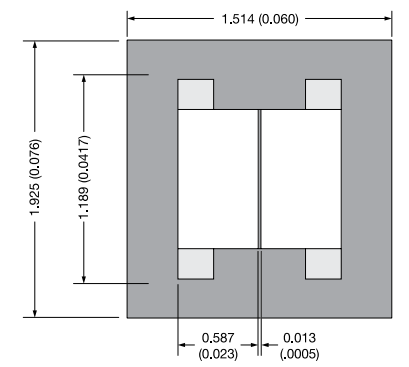
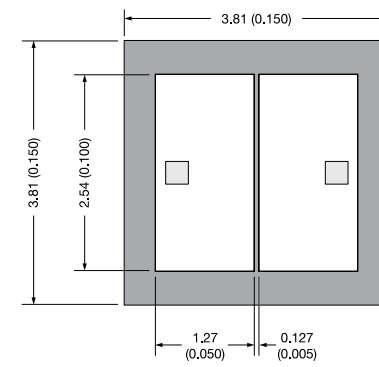
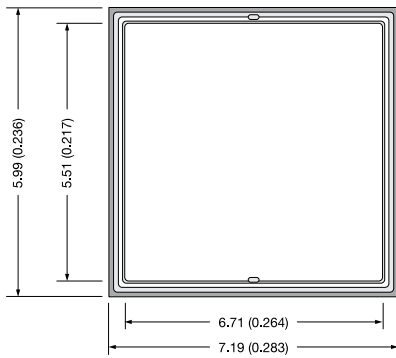
**UV-50**



**UV-35(P)**

**SPOT-2D**

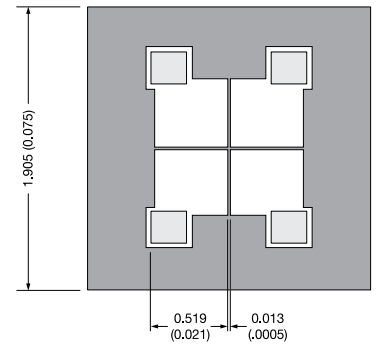
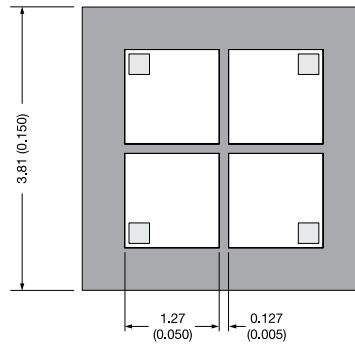
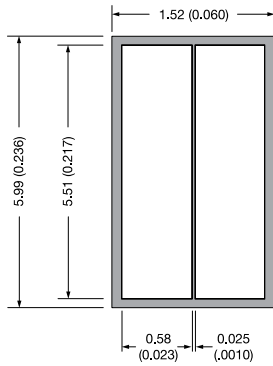
**SPOT-2DM1**



**SPOT-3D**

**SPOT-4D**

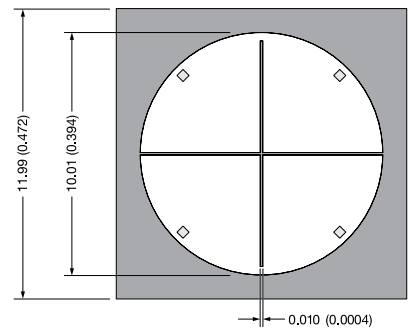
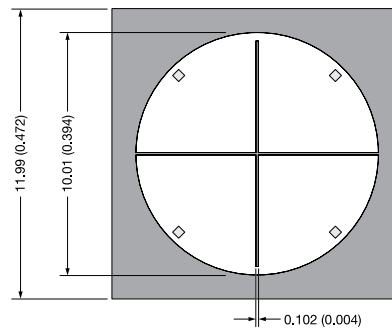
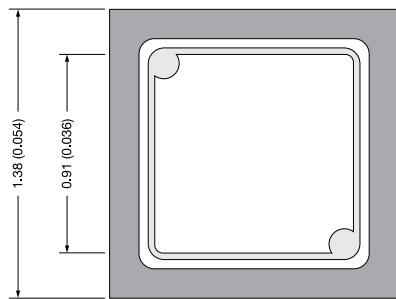
**SPOT-4DM1**



**BPX-65**

**SPOT-9D**

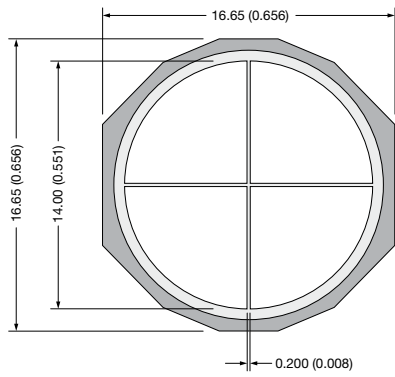
**SPOT-9DM**



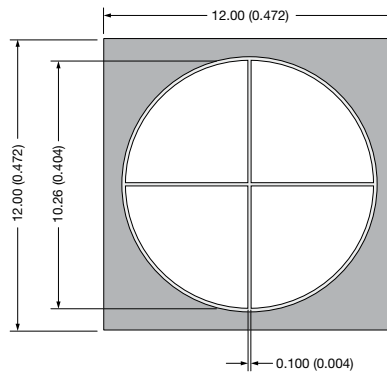
# Die Topography

All chip dimension are in millimeters (inches in parentheses).

## ■ SPOT-15-YAG



## ■ SPOT-9-YAG



## ■ Custom Die Topography





# Custom Photodiode Form

Please fill out the items in the tables below in order to assist us in selecting the most appropriate item for your requirements. You may not need, or able to complete ALL items. Hence, simply fill out what you can and fax or mail the form directly to the factory or one of our sales representatives. We will return back to you with a prompt quotation.

Personal Information		Purchase Information	
Company:		Description:	
Name:		Quantity Required:	
Position:		Date Required:	
Address:		Target Price:	
State / Zip Code:		Competitor P/N:	
Telephone:		Application:	
Fax:			
E-mail:			

Photodetector Electro-Optical Specifications Per Element				Mechanical / Packaging Specifications	
Die Size:		Min. Responsivity @		TO Metal Can:	
Active Area Size:		Max. Dark Current @		Ceramic Substrate:	Common Anode or Cathode: Chip Only; w/ Solderable Pads
Operating Wavelength:		Max. Capacitance @		Isolated Chip:	w / Wirebond Pads
Applied Bias:		Max. Rise/Fall Time @		Other Packaging Requirements:	
<b>Multi-Element Arrays</b>		<b>Detector / Amplifier Combination</b>			
No. of Elements:		Operating Frequency:		Environmental Requirements, e.g. Operating Temperature, etc.:	
Active Area / Element:		Gain:			
Center Pitch:		Supply Voltage:			
Max. Crosstalk:		Light Power & Wavelength:			

**Special Drawing or Specifications**

A large grid area for providing special drawings or specifications, consisting of 30 columns and 25 rows.