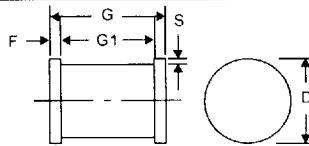
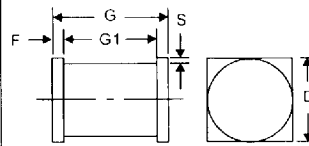
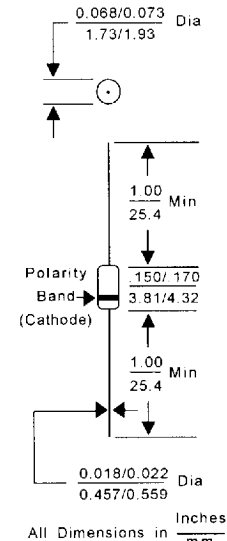


# SWITCHING DIODES, SURFACE MOUNT, MELF PACKAGE

| ISI<br>Part<br>Number | Power<br>Dissipation | Peak<br>Reverse<br>Voltage | Maximum<br>Average<br>Fwd Current | Maximum<br>Forward<br>Voltage<br>Drop at $I_F$ |            | Maximum<br>Reverse<br>Current at $V_R$ |            | Maximum<br>Reverse<br>Recovery<br>Time | Package<br>Quantities | Outline                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |     |    |  |        |  |     |     |     |     |   |      |      |      |      |   |      |      |      |      |   |      |      |      |      |   |      |  |      |  |    |          |  |          |  |
|-----------------------|----------------------|----------------------------|-----------------------------------|------------------------------------------------|------------|----------------------------------------|------------|----------------------------------------|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|----|--|--------|--|-----|-----|-----|-----|---|------|------|------|------|---|------|------|------|------|---|------|------|------|------|---|------|--|------|--|----|----------|--|----------|--|
|                       | $P_D$ (mW)           | $V_{RM}$ (Volts)           | $I_F$ (mA)                        | $V_F$ (V)                                      | $I_F$ (mA) | $V_R$ (V)                              | $I_R$ (nA) | $T_{RR}$ (nS)                          | 7" Reel               | Inches/millimeters                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |     |    |  |        |  |     |     |     |     |   |      |      |      |      |   |      |      |      |      |   |      |      |      |      |   |      |  |      |  |    |          |  |          |  |
| LL4148                | 500                  | 100                        | 150                               | 1.0                                            | 10         | 20                                     | 25         | 4.0                                    | 2500                  |  <table><thead><tr><th rowspan="2">DIM</th><th colspan="2">MM</th><th colspan="2">INCHES</th></tr><tr><th>MIN</th><th>MAX</th><th>MIN</th><th>MAX</th></tr></thead><tbody><tr><td>D</td><td>1.40</td><td>1.50</td><td>.055</td><td>.060</td></tr><tr><td>F</td><td>0.20</td><td>0.40</td><td>.008</td><td>.016</td></tr><tr><td>G</td><td>3.40</td><td>3.60</td><td>.134</td><td>.142</td></tr><tr><td>S</td><td>0.03</td><td></td><td>.001</td><td></td></tr><tr><td>G1</td><td>2.90 REF</td><td></td><td>.145 REF</td><td></td></tr></tbody></table> <b>MiniMELF</b>        | DIM | MM |  | INCHES |  | MIN | MAX | MIN | MAX | D | 1.40 | 1.50 | .055 | .060 | F | 0.20 | 0.40 | .008 | .016 | G | 3.40 | 3.60 | .134 | .142 | S | 0.03 |  | .001 |  | G1 | 2.90 REF |  | .145 REF |  |
| DIM                   | MM                   |                            | INCHES                            |                                                |            |                                        |            |                                        |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |     |    |  |        |  |     |     |     |     |   |      |      |      |      |   |      |      |      |      |   |      |      |      |      |   |      |  |      |  |    |          |  |          |  |
|                       | MIN                  | MAX                        | MIN                               | MAX                                            |            |                                        |            |                                        |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |     |    |  |        |  |     |     |     |     |   |      |      |      |      |   |      |      |      |      |   |      |      |      |      |   |      |  |      |  |    |          |  |          |  |
| D                     | 1.40                 | 1.50                       | .055                              | .060                                           |            |                                        |            |                                        |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |     |    |  |        |  |     |     |     |     |   |      |      |      |      |   |      |      |      |      |   |      |      |      |      |   |      |  |      |  |    |          |  |          |  |
| F                     | 0.20                 | 0.40                       | .008                              | .016                                           |            |                                        |            |                                        |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |     |    |  |        |  |     |     |     |     |   |      |      |      |      |   |      |      |      |      |   |      |      |      |      |   |      |  |      |  |    |          |  |          |  |
| G                     | 3.40                 | 3.60                       | .134                              | .142                                           |            |                                        |            |                                        |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |     |    |  |        |  |     |     |     |     |   |      |      |      |      |   |      |      |      |      |   |      |      |      |      |   |      |  |      |  |    |          |  |          |  |
| S                     | 0.03                 |                            | .001                              |                                                |            |                                        |            |                                        |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |     |    |  |        |  |     |     |     |     |   |      |      |      |      |   |      |      |      |      |   |      |      |      |      |   |      |  |      |  |    |          |  |          |  |
| G1                    | 2.90 REF             |                            | .145 REF                          |                                                |            |                                        |            |                                        |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |     |    |  |        |  |     |     |     |     |   |      |      |      |      |   |      |      |      |      |   |      |      |      |      |   |      |  |      |  |    |          |  |          |  |
| LL4149                | 500                  | 100                        | 150                               | 1.0                                            | 10         | 20                                     | 25         | 4.0                                    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |     |    |  |        |  |     |     |     |     |   |      |      |      |      |   |      |      |      |      |   |      |      |      |      |   |      |  |      |  |    |          |  |          |  |
| LL4150                | 500                  | 50                         | 20                                | 1.0                                            | 200        | 50                                     | 100        | 4.0                                    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |     |    |  |        |  |     |     |     |     |   |      |      |      |      |   |      |      |      |      |   |      |      |      |      |   |      |  |      |  |    |          |  |          |  |
| LL4151                | 500                  | 75                         | 150                               | 1.0                                            | 50         | 50                                     | 50         | 2.0                                    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |     |    |  |        |  |     |     |     |     |   |      |      |      |      |   |      |      |      |      |   |      |      |      |      |   |      |  |      |  |    |          |  |          |  |
| LL4152                | 400                  | 40                         | 150                               | 0.55                                           | 0.10       | 30                                     | 50         | 2.0                                    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |     |    |  |        |  |     |     |     |     |   |      |      |      |      |   |      |      |      |      |   |      |      |      |      |   |      |  |      |  |    |          |  |          |  |
| LL4153                | 400                  | 75                         | 150                               | 0.55                                           | 0.10       | 50                                     | 50         | 2.0                                    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |     |    |  |        |  |     |     |     |     |   |      |      |      |      |   |      |      |      |      |   |      |      |      |      |   |      |  |      |  |    |          |  |          |  |
| LL4154                | 500                  | 35                         | 150                               | 1.0                                            | 30         | 25                                     | 100        | 2.0                                    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |     |    |  |        |  |     |     |     |     |   |      |      |      |      |   |      |      |      |      |   |      |      |      |      |   |      |  |      |  |    |          |  |          |  |
| LL4446                | 500                  | 100                        | 150                               | 1.0                                            | 20         | 20                                     | 25         | 4.0                                    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |     |    |  |        |  |     |     |     |     |   |      |      |      |      |   |      |      |      |      |   |      |      |      |      |   |      |  |      |  |    |          |  |          |  |
| LL4447                | 500                  | 100                        | 150                               | 1.0                                            | 20         | 20                                     | 25         | 4.0                                    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |     |    |  |        |  |     |     |     |     |   |      |      |      |      |   |      |      |      |      |   |      |      |      |      |   |      |  |      |  |    |          |  |          |  |
| LL4448                | 500                  | 100                        | 150                               | 1.0                                            | 100        | 20                                     | 25         | 4.0                                    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |     |    |  |        |  |     |     |     |     |   |      |      |      |      |   |      |      |      |      |   |      |      |      |      |   |      |  |      |  |    |          |  |          |  |
| LL4449                | 500                  | 100                        | 150                               | 1.0                                            | 100        | 20                                     | 25         | 4.0                                    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |     |    |  |        |  |     |     |     |     |   |      |      |      |      |   |      |      |      |      |   |      |      |      |      |   |      |  |      |  |    |          |  |          |  |
| LL4450                | 400                  | 40                         | 150                               | 0.54                                           | 0.50       | 30                                     | 50         | 4.0                                    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |     |    |  |        |  |     |     |     |     |   |      |      |      |      |   |      |      |      |      |   |      |      |      |      |   |      |  |      |  |    |          |  |          |  |
| LL4451                | 400                  | 40                         | 150                               | 0.50                                           | 0.10       | 30                                     | 50         | 10                                     |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |     |    |  |        |  |     |     |     |     |   |      |      |      |      |   |      |      |      |      |   |      |      |      |      |   |      |  |      |  |    |          |  |          |  |
| LL4453                | 400                  | 30                         | 150                               | 0.55                                           | 0.01       | 20                                     | 50         | -                                      |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |     |    |  |        |  |     |     |     |     |   |      |      |      |      |   |      |      |      |      |   |      |      |      |      |   |      |  |      |  |    |          |  |          |  |
| LL4454                | 400                  | 75                         | 150                               | 1.0                                            | 10         | 50                                     | 100        | 4.0                                    |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |     |    |  |        |  |     |     |     |     |   |      |      |      |      |   |      |      |      |      |   |      |      |      |      |   |      |  |      |  |    |          |  |          |  |
| LS4148                | 500                  | 100                        | 200                               | 1.0                                            | 10         | 20                                     | 25         | 4.0                                    | 2500                  |  <table><thead><tr><th rowspan="2">DIM</th><th colspan="2">MM</th><th colspan="2">INCHES</th></tr><tr><th>MIN</th><th>MAX</th><th>MIN</th><th>MAX</th></tr></thead><tbody><tr><td>D</td><td>1.30</td><td>1.50</td><td>.051</td><td>.059</td></tr><tr><td>F</td><td>0.30</td><td>0.36</td><td>.012</td><td>.016</td></tr><tr><td>G</td><td>3.30</td><td>3.70</td><td>.130</td><td>.146</td></tr><tr><td>S</td><td>0.03</td><td></td><td>.001</td><td></td></tr><tr><td>G1</td><td>2.84 REF</td><td></td><td>.112 REF</td><td></td></tr></tbody></table> <b>Square MiniMELF</b> | DIM | MM |  | INCHES |  | MIN | MAX | MIN | MAX | D | 1.30 | 1.50 | .051 | .059 | F | 0.30 | 0.36 | .012 | .016 | G | 3.30 | 3.70 | .130 | .146 | S | 0.03 |  | .001 |  | G1 | 2.84 REF |  | .112 REF |  |
| DIM                   | MM                   |                            | INCHES                            |                                                |            |                                        |            |                                        |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |     |    |  |        |  |     |     |     |     |   |      |      |      |      |   |      |      |      |      |   |      |      |      |      |   |      |  |      |  |    |          |  |          |  |
|                       | MIN                  | MAX                        | MIN                               | MAX                                            |            |                                        |            |                                        |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |     |    |  |        |  |     |     |     |     |   |      |      |      |      |   |      |      |      |      |   |      |      |      |      |   |      |  |      |  |    |          |  |          |  |
| D                     | 1.30                 | 1.50                       | .051                              | .059                                           |            |                                        |            |                                        |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |     |    |  |        |  |     |     |     |     |   |      |      |      |      |   |      |      |      |      |   |      |      |      |      |   |      |  |      |  |    |          |  |          |  |
| F                     | 0.30                 | 0.36                       | .012                              | .016                                           |            |                                        |            |                                        |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |     |    |  |        |  |     |     |     |     |   |      |      |      |      |   |      |      |      |      |   |      |      |      |      |   |      |  |      |  |    |          |  |          |  |
| G                     | 3.30                 | 3.70                       | .130                              | .146                                           |            |                                        |            |                                        |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |     |    |  |        |  |     |     |     |     |   |      |      |      |      |   |      |      |      |      |   |      |      |      |      |   |      |  |      |  |    |          |  |          |  |
| S                     | 0.03                 |                            | .001                              |                                                |            |                                        |            |                                        |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |     |    |  |        |  |     |     |     |     |   |      |      |      |      |   |      |      |      |      |   |      |      |      |      |   |      |  |      |  |    |          |  |          |  |
| G1                    | 2.84 REF             |                            | .112 REF                          |                                                |            |                                        |            |                                        |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |     |    |  |        |  |     |     |     |     |   |      |      |      |      |   |      |      |      |      |   |      |      |      |      |   |      |  |      |  |    |          |  |          |  |

# GENERAL PURPOSE DIODES, GLASS PACKAGE

| ISi<br>Part<br>Number | Minimum<br>Breakdown<br>Voltage | Maximum<br>Reverse<br>Current |               | Forward<br>Voltage<br>Drop |            | Maximum<br>Reverse<br>Recovery<br>Time | Package<br>Quantities | Outline                                                                                                                                                                         |
|-----------------------|---------------------------------|-------------------------------|---------------|----------------------------|------------|----------------------------------------|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                       | $V_{BRM}$ (V)                   | $I_R$ (nA)                    | $V_R$ (Volts) | $V_F$ (Volts)              | $I_F$ (mA) | $T_{RR}$ (nS)                          | Bulk/Reel             | Inches/millimeters                                                                                                                                                              |
| 1N456                 | 30                              | 25                            | 25            | 1.0                        | 40         | 10                                     | 1000/<br>5,000        |  <p>All Dimensions in <math>\frac{\text{Inches}}{\text{mm}}</math></p> <p><b>DO-35</b></p> |
| 1N456A                | 30                              | 25                            | 26            | 1.0                        | 100        | 10                                     |                       |                                                                                                                                                                                 |
| 1N457                 | 70                              | 25                            | 60            | 1.0                        | 20         | 8.0                                    |                       |                                                                                                                                                                                 |
| 1N457A                | 70                              | 25                            | 60            | 1.0                        | 100        | 8.0                                    |                       |                                                                                                                                                                                 |
| 1N458                 | 150                             | 25                            | 125           | 1.0                        | 7          | 6.0                                    |                       |                                                                                                                                                                                 |
| 1N458A                | 150                             | 25                            | 125           | 1.0                        | 100        | 6.0                                    |                       |                                                                                                                                                                                 |
| 1N459                 | 200                             | 25                            | 175           | 1.0                        | 3          | 6.0                                    |                       |                                                                                                                                                                                 |
| 1N459A                | 200                             | 25                            | 175           | 1.0                        | 100        | 6.0                                    |                       |                                                                                                                                                                                 |
| 1N461A                | 30                              | 500                           | 25            | 1.0                        | 100        | 6.0                                    |                       |                                                                                                                                                                                 |
| 1N462A                | 70                              | 500                           | 60            | 1.0                        | 100        | 6.0                                    |                       |                                                                                                                                                                                 |
| 1N463A                | 200                             | 500                           | 175           | 1.0                        | 100        | 6.0                                    |                       |                                                                                                                                                                                 |
| 1N625                 | 30                              | 1000                          | 20            | 1.5                        | 4.0        | 1000                                   |                       |                                                                                                                                                                                 |
| 1N626                 | 50                              | 1000                          | 30            | 1.5                        | 4.0        | 1000                                   |                       |                                                                                                                                                                                 |
| 1N627                 | 100                             | 1000                          | 75            | 1.5                        | 4.0        | 1000                                   |                       |                                                                                                                                                                                 |
| 1N628                 | 150                             | 1000                          | 125           | 1.5                        | 4.0        | 1000                                   |                       |                                                                                                                                                                                 |
| 1N629                 | 200                             | 1000                          | 175           | 1.5                        | 4.0        | 1000                                   |                       |                                                                                                                                                                                 |
| 1N659                 | 60                              | 5000                          | 50            | 1.0                        | 6.0        | 300                                    |                       |                                                                                                                                                                                 |
| 1N660                 | 120                             | 5000                          | 100           | 1.0                        | 6.0        | 300                                    |                       |                                                                                                                                                                                 |
| 1N661                 | 240                             | 10000                         | 200           | 1.0                        | 6.0        | 300                                    |                       |                                                                                                                                                                                 |
| 1N3070                | 200                             | 100                           | 175           | 1.0                        | 100        | 50                                     |                       |                                                                                                                                                                                 |
| 1N4938                | 200                             | 100                           | 175           | 1.0                        | 100        | 50                                     |                       |                                                                                                                                                                                 |