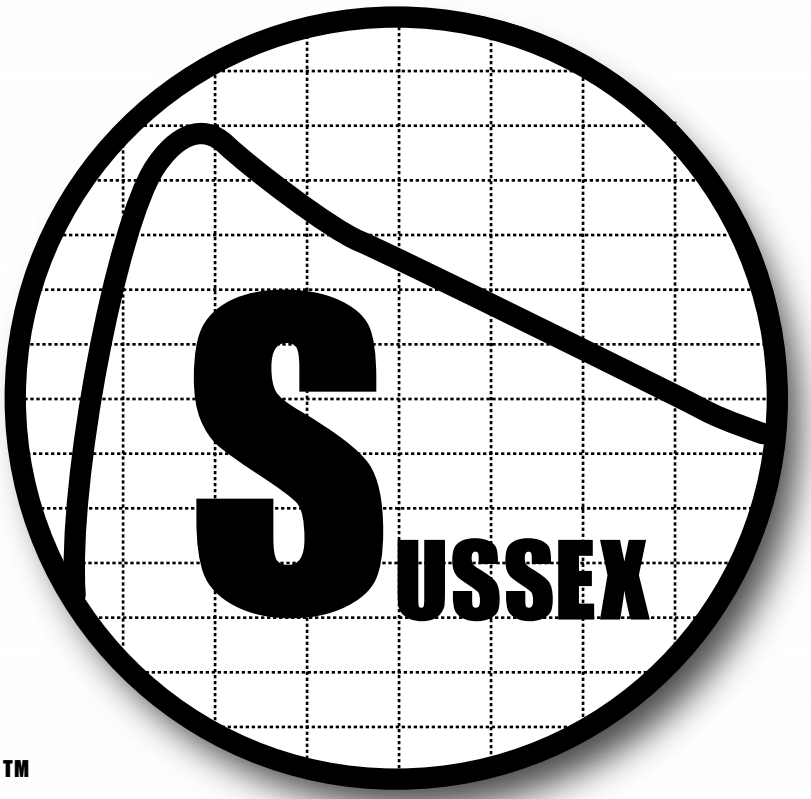


TM

SUSSEX SEMICONDUCTOR, INC.

# Bridge Rectifiers

# SECTION 4

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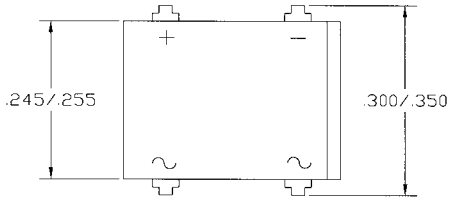
# 1.0 AMP BRIDGE RECTIFIERS

Top View

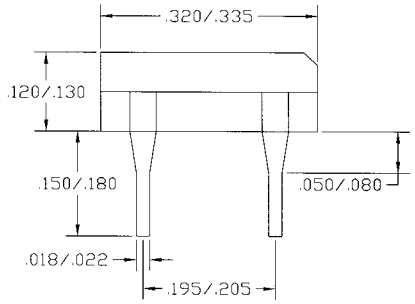



**SINGLE - PHASE BRIDGE RECTIFIER**

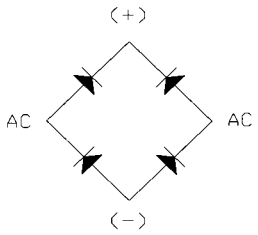
**REVERSE VOLTAGES - 50 TO 1000 VOLTS**

**FORWARD CURRENT - 1.0 AMPS**

Side View




Electrical Schematic




All Dimensions In Inches

## 1.0 AMP BRIDGE RECTIFIER SPECIFICATIONS

- Plated Leads Guarantee Excellent Solderability
- Molded Plastic Case
- Typical Leakage Current Less Than .1µA
- Ideal For Printed Circuit Boards
- Polarity Indicated By Solvent Resistant Marking
- Operating Temperature: -55 to 150°C
- Storage Temperature: -55 to 150°C
- High Isolation Resistance From Case To Leads

**TABLE 1A - STANDARD DEVICE ELECTRICAL SPECIFICATIONS** (NOTE 1)

| SUSSEX PART NUMBER | MAX. AVERAGE FORWARD RECTIFIED OUTPUT CURRENT $T_{CASE}$=55 °C AMPS | MAX. INSTANTANEOUS FORWARD VOLTAGE PER BRIDGE ELEMENT | | MAX. LEAKAGE CURRENT $I_R$ @ $V_{DC}$ | | PEAK FORWARD SURGE CURRENT (NOTE 2) AMPS | MAX. RECURRENT PEAK REVERSE VOLTAGE ($V_{RRM}$) VOLTS | MAX. RMS INPUT VOLTAGE ($V_{RMS}$) VOLTS |
|---|---|---|---|---|---|---|---|---|
| | | FORWARD VOLTAGE TEST CURRENT ($I_F$) AMPS | PEAK FORWARD VOLTAGE @ $I_F$ VOLTS | $V_{DC}$ VOLTS | $I_R$ µA | | | |
| BDG-D1.0-50 | 1.0 | 1.0 | 1.1 | 50 | 5 | 50 | 50 | 35 |
| BDG-D1.0-100 | 1.0 | 1.0 | 1.1 | 100 | 5 | 50 | 100 | 70 |
| BDG-D1.0-200 | 1.0 | 1.0 | 1.1 | 200 | 5 | 50 | 200 | 140 |
| BDG-D1.0-400 | 1.0 | 1.0 | 1.1 | 400 | 5 | 50 | 400 | 280 |
| BDG-D1.0-600 | 1.0 | 1.0 | 1.1 | 600 | 5 | 50 | 600 | 420 |
| BDG-D1.0-800 | 1.0 | 1.0 | 1.1 | 800 | 5 | 50 | 800 | 560 |
| BDG-D1.0-1000 | 1.0 | 1.0 | 1.1 | 1000 | 5 | 50 | 1000 | 700 |

**NOTES**

**NOTE 1** ♦ELECTRICAL CHARACTERISTICS MEASURED AT 25°C UNLESS OTHERWISE STATED.

**NOTE 2** ♦PEAK FORWARD SURGE CURRENT MEASURED FROM A SINGLE SINE-WAVE BEING SUPERIMPOSED ON THE RATED LOAD (JEDEC METHOD).

**FIGURE 1A - BRIDGE RECTIFIER DERATING CURVE**

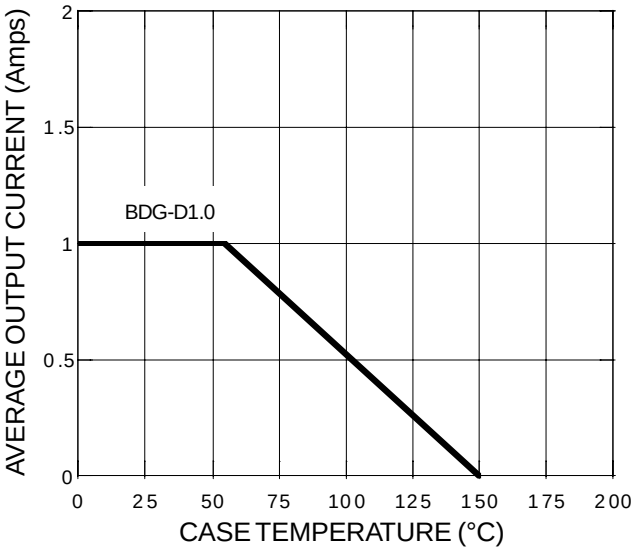



**FIGURE 2A - TYPICAL JUNCTION CAPACITANCE PER LEG**

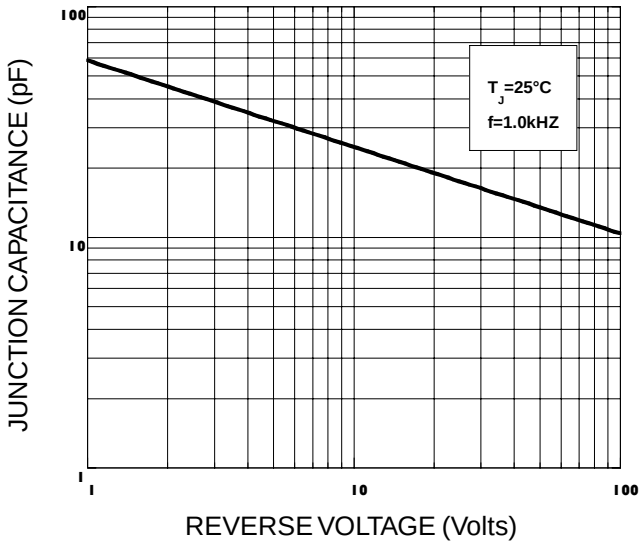



**FIGURE 3A - TYPICAL FORWARD CHARACTERISTICS PER LEG**

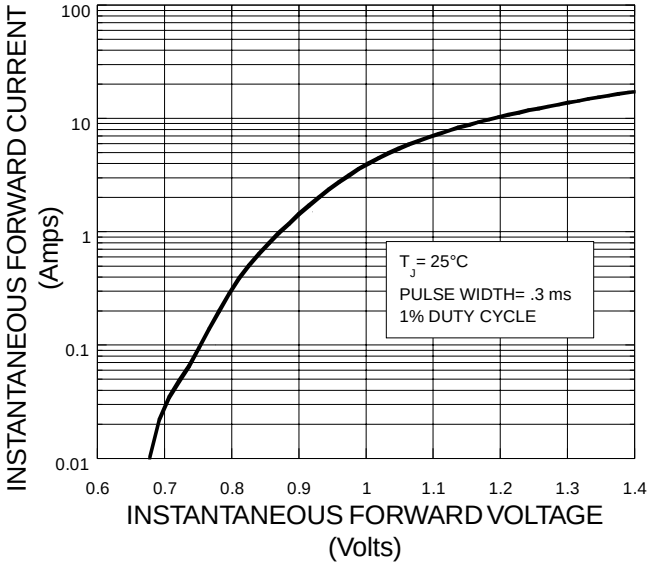
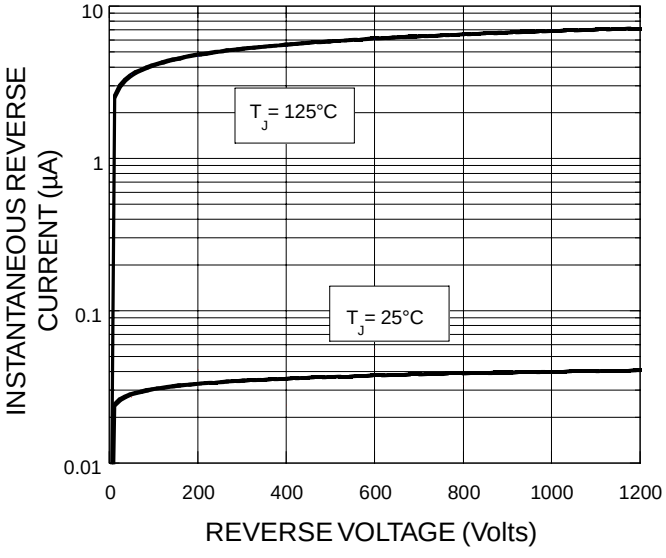



**FIGURE 4A - TYPICAL REVERSE VOLTAGE CHARACTERISTICS PER LEG**



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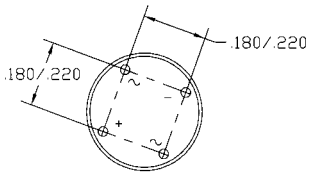
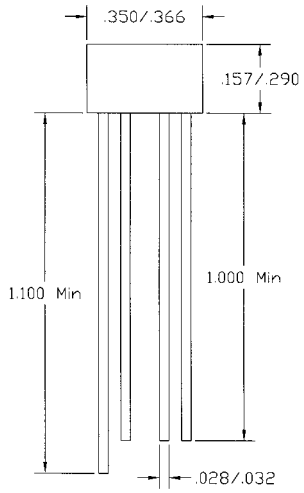
# 1.5 AMP BRIDGE RECTIFIERS

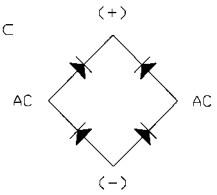
Top View




Side View




Electrical Schematic




All Dimensions In Inches

**SINGLE - PHASE BRIDGE RECTIFIER**

**REVERSE VOLTAGES - 50 TO 1000 VOLTS**

**FORWARD CURRENT - 1.5 AMPS**

## 1.5 AMP BRIDGE RECTIFIER SPECIFICATIONS

- Plated Leads Guarantee Excellent Solderability
- Encapsulated In An Epoxy Filled Plastic Case
- Typical Leakage Current Less Than .1µA
- Ideal For Printed Circuit Boards
- Polarity Indicated By Solvent Resistant Marking
- Operating Temperature: -50 to 125°C
- Storage Temperature: -50 to 150°C
- High Isolation Resistance From Case To Leads

**TABLE 1A - STANDARD DEVICE ELECTRICAL SPECIFICATIONS** (NOTE 1)

| SUSSEX PART NUMBER | MAX. AVERAGE FORWARD RECTIFIED OUTPUT CURRENT $T_{CASE}$=55 °C AMPS | MAX. INSTANTANEOUS FORWARD VOLTAGE PER BRIDGE ELEMENT | | MAX. LEAKAGE CURRENT $I_R$ @ $V_{DC}$ | | PEAK FORWARD SURGE CURRENT (NOTE 2) AMPS | MAX. RECURRENT PEAK REVERSE VOLTAGE ($V_{RRM}$) VOLTS | MAX. RMS INPUT VOLTAGE ($V_{RMS}$) VOLTS |
|---|---|---|---|---|---|---|---|---|
| | | FORWARD VOLTAGE TEST CURRENT ($I_F$) AMPS | PEAK FORWARD VOLTAGE @ $I_F$ VOLTS | $V_{DC}$ VOLTS | $I_R$ µA | | | |
| BDG-C1.5-50 | 1.5 | 1.5 | 1.0 | 50 | 5 | 50 | 50 | 35 |
| BDG-C1.5-100 | 1.5 | 1.5 | 1.0 | 100 | 5 | 50 | 100 | 70 |
| BDG-C1.5-200 | 1.5 | 1.5 | 1.0 | 200 | 5 | 50 | 200 | 140 |
| BDG-C1.5-400 | 1.5 | 1.5 | 1.0 | 400 | 5 | 50 | 400 | 280 |
| BDG-C1.5-600 | 1.5 | 1.5 | 1.0 | 600 | 5 | 50 | 600 | 420 |
| BDG-C1.5-800 | 1.5 | 1.5 | 1.0 | 800 | 5 | 50 | 800 | 560 |
| BDG-C1.5-1000 | 1.5 | 1.5 | 1.0 | 1000 | 5 | 50 | 1000 | 700 |

**NOTES**

**NOTE 1** ♦ELECTRICAL CHARACTERISTICS MEASURED AT 25°C UNLESS OTHERWISE STATED.

**NOTE 2** ♦PEAK FORWARD SURGE CURRENT MEASURED FROM A SINGLE SINE-WAVE BEING SUPERIMPOSED ON THE RATED LOAD (JEDEC METHOD).

**FIGURE 1A - BRIDGE RECTIFIER DERATING CURVE**

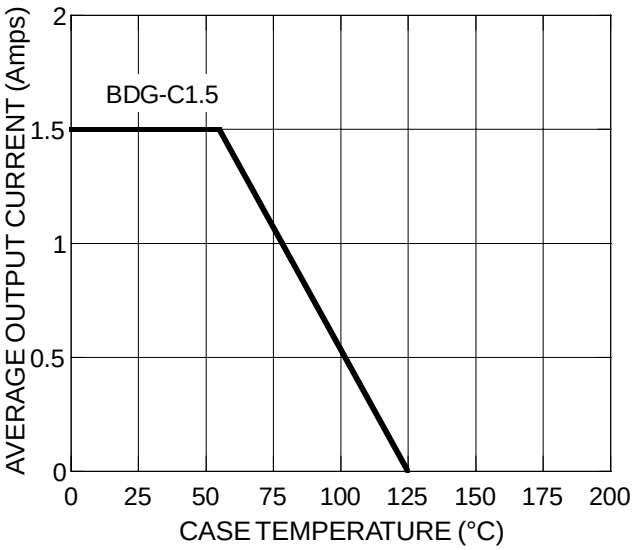



**FIGURE 2A - TYPICAL JUNCTION CAPACITANCE PER LEG**

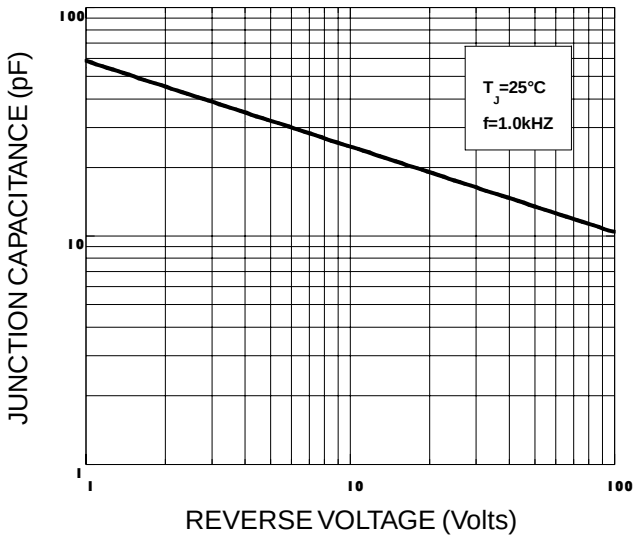



**FIGURE 3A - TYPICAL FORWARD CHARACTERISTICS PER LEG**

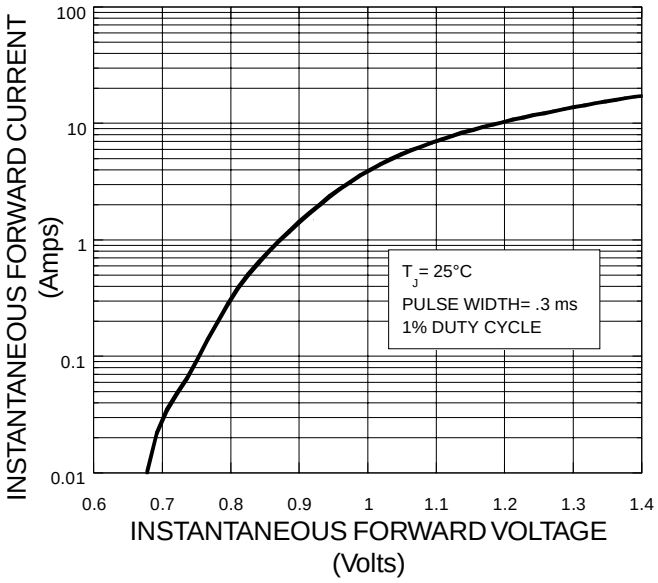
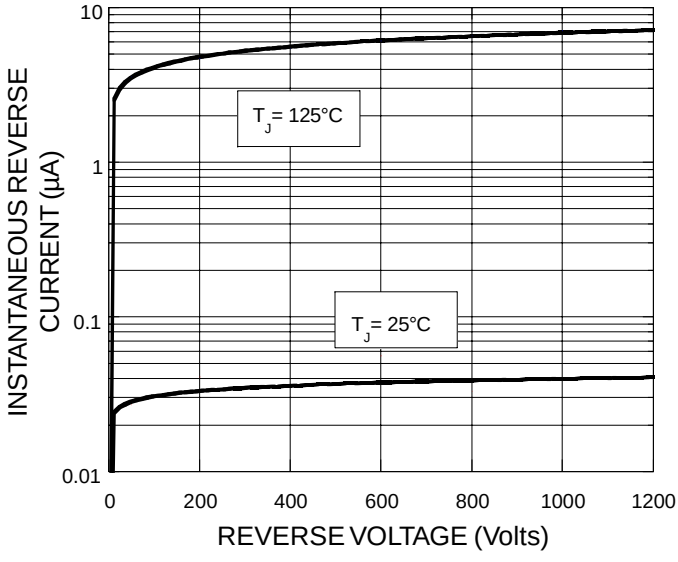



**FIGURE 4A - TYPICAL REVERSE VOLTAGE CHARACTERISTICS PER LEG**



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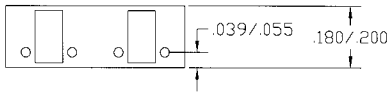
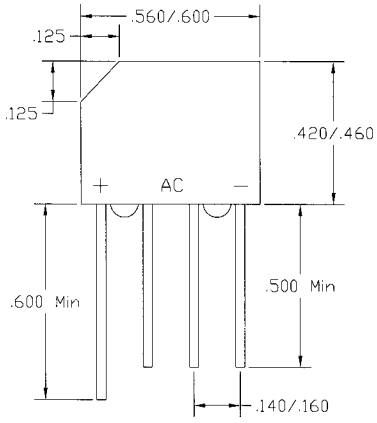
# 2.0 AMP BRIDGE RECTIFIERS

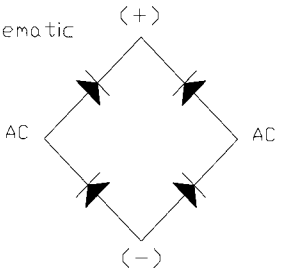
Top View




Side View




Electrical Schematic




All Dimensions In Inches

**SINGLE - PHASE IN-LINE BRIDGE RECTIFIER**

**REVERSE VOLTAGES - 50 TO 1000 VOLTS**

**FORWARD CURRENT - 2.0 AMPS**

## 2.0 AMP IN-LINE BRIDGE RECTIFIER SPECIFICATIONS

- Plated Leads Guarantee Excellent Solderability
- Molded Plastic Case
- Typical Leakage Current Less Than .1µA
- Ideal For Printed Circuit Boards
- Polarity Indicated By Solvent Resistant Marking
- Operating Temperature: -50 to 150°C
- Storage Temperature: -50 to 150°C
- High Isolation Resistance From Case To Leads

**TABLE 1A - STANDARD DEVICE ELECTRICAL SPECIFICATIONS** (NOTE 1)

| SUSSEX PART NUMBER | MAX. AVERAGE FORWARD RECTIFIED OUTPUT CURRENT $T_{CASE}$=55 °C AMPS | MAX. INSTANTANEOUS FORWARD VOLTAGE PER BRIDGE ELEMENT | | MAX. LEAKAGE CURRENT $I_R$ @ $V_{DC}$ | | PEAK FORWARD SURGE CURRENT (NOTE 2) AMPS | MAX. RECURRENT PEAK REVERSE VOLTAGE ($V_{RRM}$) VOLTS | MAX. RMS INPUT VOLTAGE ($V_{RMS}$) VOLTS |
|---|---|---|---|---|---|---|---|---|
| | | FORWARD VOLTAGE TEST CURRENT ($I_F$) AMPS | PEAK FORWARD VOLTAGE @ $I_F$ VOLTS | $V_{DC}$ VOLTS | $I_R$ µA | | | |
| BDG-R2.0-50 | 2.0 | 3.1 | 1.1 | 50 | 5 | 60 | 50 | 35 |
| BDG-R2.0-100 | 2.0 | 3.1 | 1.1 | 100 | 5 | 60 | 100 | 70 |
| BDG-R2.0-200 | 2.0 | 3.1 | 1.1 | 200 | 5 | 60 | 200 | 140 |
| BDG-R2.0-400 | 2.0 | 3.1 | 1.1 | 400 | 5 | 60 | 400 | 280 |
| BDG-R2.0-600 | 2.0 | 3.1 | 1.1 | 600 | 5 | 60 | 600 | 420 |
| BDG-R2.0-800 | 2.0 | 3.1 | 1.1 | 800 | 5 | 60 | 800 | 560 |
| BDG-R2.0-1000 | 2.0 | 3.1 | 1.1 | 1000 | 5 | 60 | 1000 | 700 |

**NOTES**

**NOTE 1** ♦ELECTRICAL CHARACTERISTICS MEASURED AT 25°C UNLESS OTHERWISE STATED.

**NOTE 2** ♦PEAK FORWARD SURGE CURRENT MEASURED FROM A SINGLE SINE-WAVE BEING SUPERIMPOSED ON THE RATED LOAD (JEDEC METHOD).

**FIGURE 1A - BRIDGE RECTIFIER DERATING CURVE**

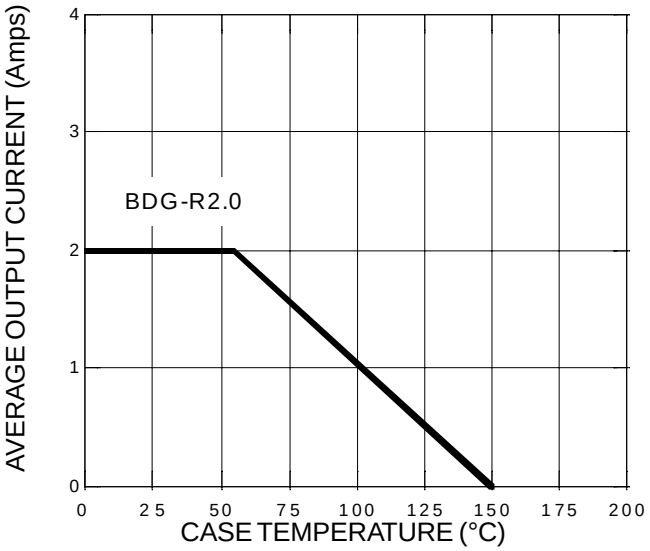



**FIGURE 2A - TYPICAL JUNCTION CAPACITANCE PER LEG**

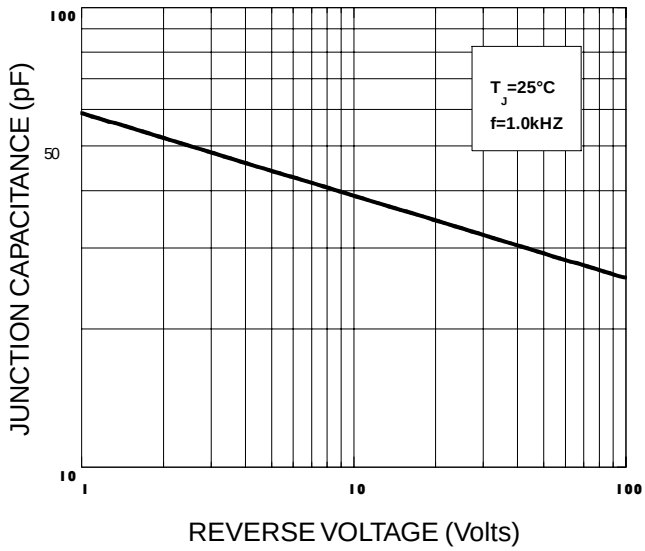



**FIGURE 3A - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER LEG**

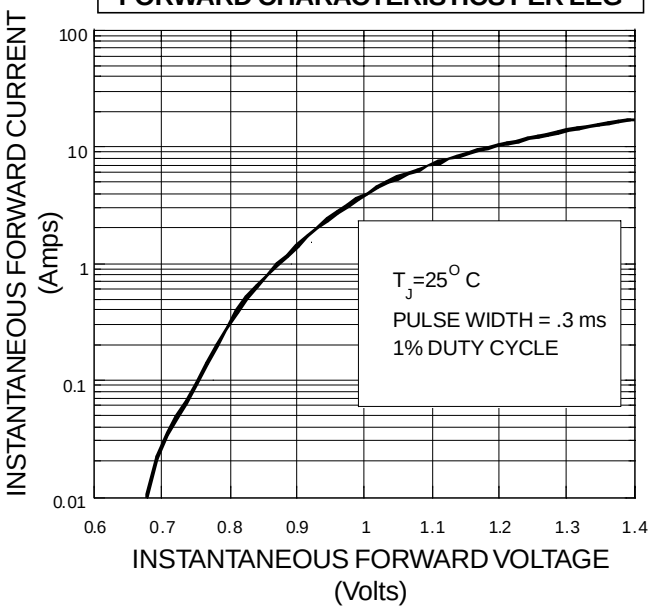
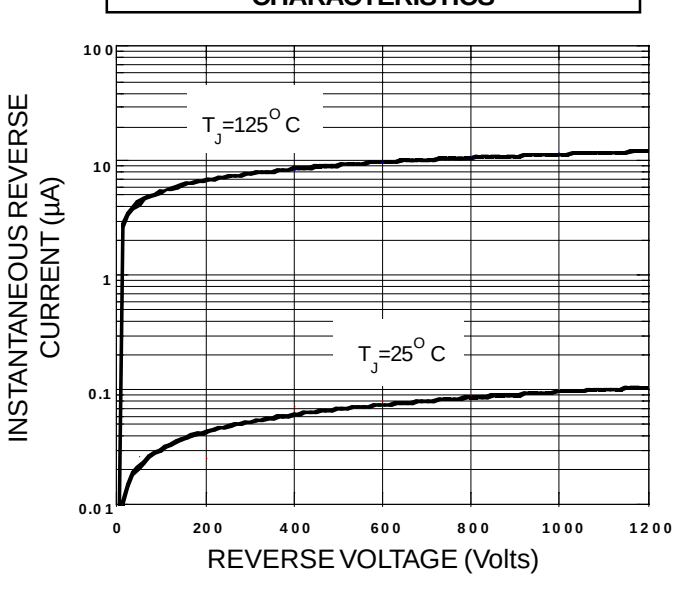



**FIGURE 4A - TYPICAL REVERSE VOLTAGE CHARACTERISTICS**



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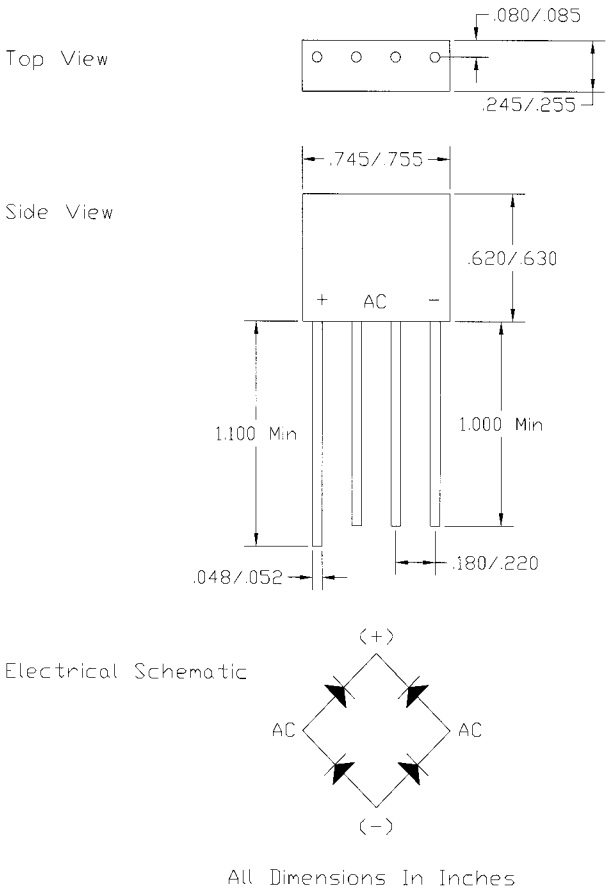
# 4.0 AMP BRIDGE RECTIFIERS




**SINGLE - PHASE IN-LINE BRIDGE RECTIFIER**

**REVERSE VOLTAGES - 50 TO 1000 VOLTS**

**FORWARD CURRENT - 4.0 AMPS**

## 4.0 AMP IN-LINE BRIDGE RECTIFIER SPECIFICATIONS

- Plated Leads Guarantee Excellent Solderability
- Molded Plastic Case
- Typical Leakage Current Less Than .1µA
- Ideal For Printed Circuit Boards
- Polarity Indicated By Solvent Resistant Marking
- Operating Temperature: -50 to 150°C
- Storage Temperature: -50 to 150°C
- High Isolation Resistance From Case To Leads

**TABLE 1A - STANDARD DEVICE ELECTRICAL SPECIFICATIONS** (NOTE 1)

| SUSSEX PART NUMBER | MAX. AVERAGE FORWARD RECTIFIED OUTPUT CURRENT $T_{CASE}$=55 °C AMPS | MAX. INSTANTANEOUS FORWARD VOLTAGE PER BRIDGE ELEMENT | | MAX. LEAKAGE CURRENT $I_R$ @ $V_{DC}$ | | PEAK FORWARD SURGE CURRENT (NOTE 2) AMPS | MAX. RECURRENT PEAK REVERSE VOLTAGE ($V_{RRM}$) VOLTS | MAX. RMS INPUT VOLTAGE ($V_{RMS}$) VOLTS |
|---|---|---|---|---|---|---|---|---|
| | | FORWARD VOLTAGE TEST CURRENT ($I_F$) AMPS | PEAK FORWARD VOLTAGE @ $I_F$ VOLTS | $V_{DC}$ VOLTS | $I_R$ µA | | | |
| BDG-R4.0-50 | 4.0 | 4.0 | 1.1 | 50 | 5 | 200 | 50 | 35 |
| BDG-R4.0-100 | 4.0 | 4.0 | 1.1 | 100 | 5 | 200 | 100 | 70 |
| BDG-R4.0-200 | 4.0 | 4.0 | 1.1 | 200 | 5 | 200 | 200 | 140 |
| BDG-R4.0-400 | 4.0 | 4.0 | 1.1 | 400 | 5 | 200 | 400 | 280 |
| BDG-R4.0-600 | 4.0 | 4.0 | 1.1 | 600 | 5 | 200 | 600 | 420 |
| BDG-R4.0-800 | 4.0 | 4.0 | 1.1 | 800 | 5 | 200 | 800 | 560 |
| BDG-R4.0-1000 | 4.0 | 4.0 | 1.1 | 1000 | 5 | 200 | 1000 | 700 |

**NOTES**

**NOTE 1** ♦ELECTRICAL CHARACTERISTICS MEASURED AT 25°C UNLESS OTHERWISE STATED.

**NOTE 2** ♦PEAK FORWARD SURGE CURRENT MEASURED FROM A SINGLE SINE-WAVE BEING SUPERIMPOSED ON THE RATED LOAD (JEDEC METHOD).

**FIGURE 1A - BRIDGE RECTIFIER DERATING CURVE**

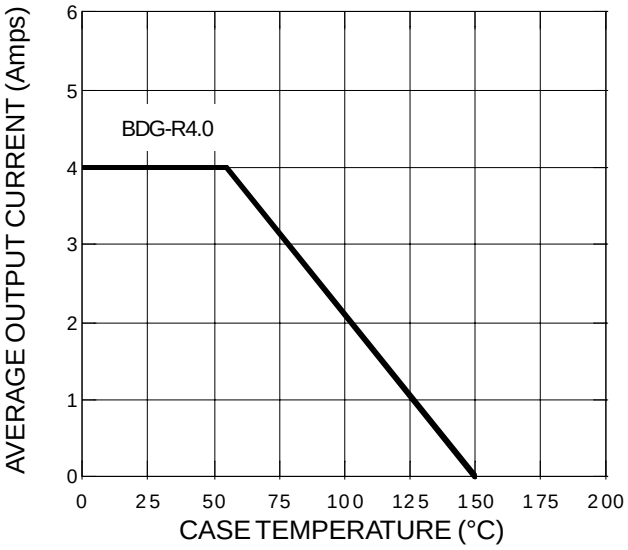



**FIGURE 2A - TYPICAL JUNCTION CAPACITANCE PER LEG**

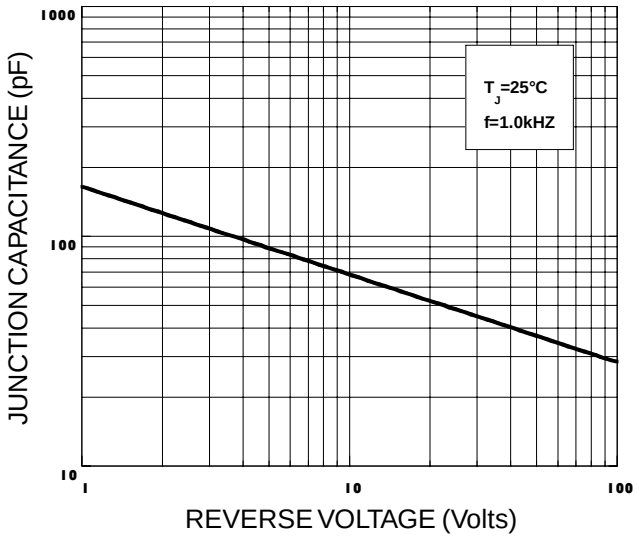



**FIGURE 3A - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER LEG**

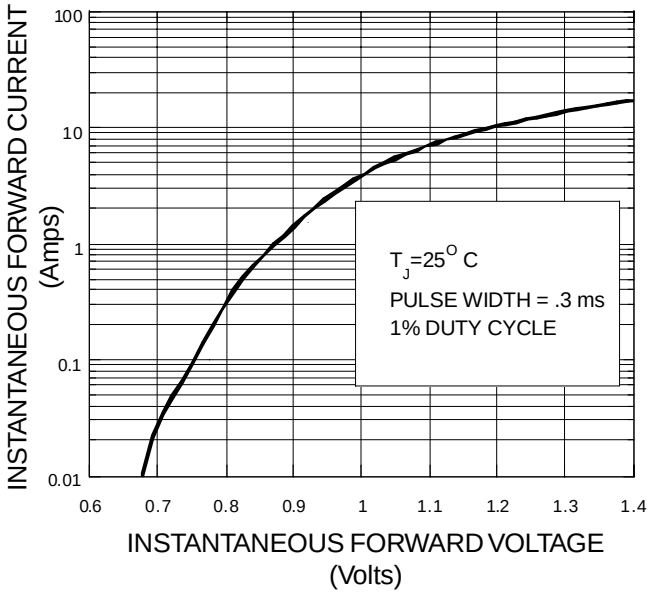
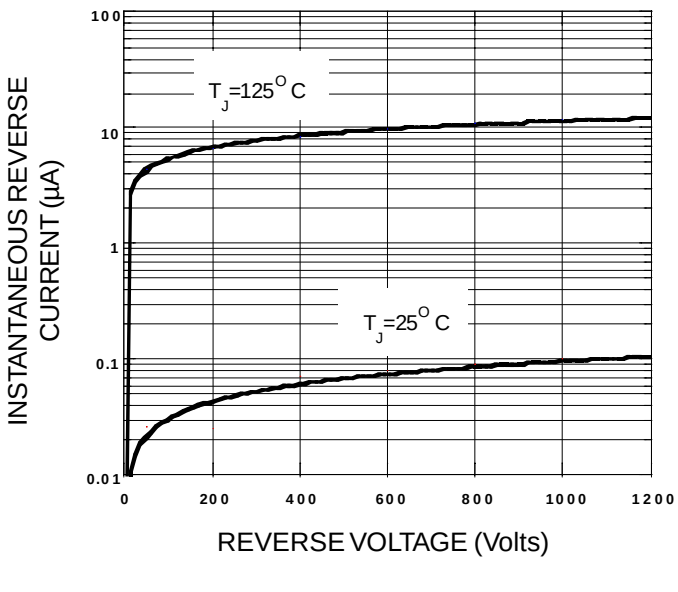



**FIGURE 4A - TYPICAL REVERSE VOLTAGE CHARACTERISTICS**



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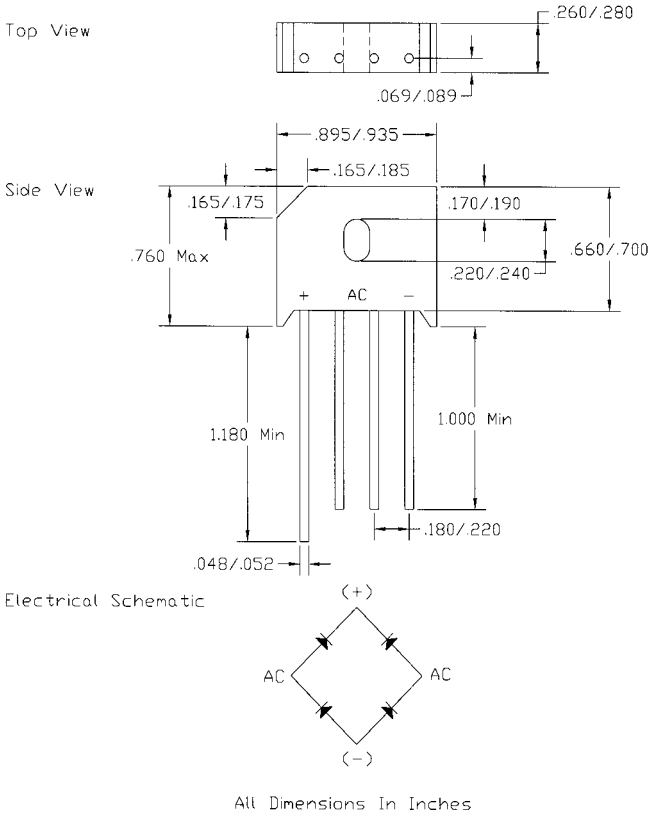
# 6.0 AND 8.0 AMP BRIDGE RECTIFIERS




**SINGLE - PHASE IN-LINE BRIDGE RECTIFIER**

**REVERSE VOLTAGES - 50 TO 1000 VOLTS**

**FORWARD CURRENT - 6.0 TO 8.0 AMPS**

## 6.0 AND 8.0 AMP IN-LINE BRIDGE RECTIFIER SPECIFICATIONS

- Plated Leads Guarantee Excellent Solderability
- Molded Plastic Case
- Typical Leakage Current Less Than .1µA
- Ideal For Printed Circuit Boards
- Polarity Indicated By Solvent Resistant Marking
- Operating Temperature: -50 to 150°C
- Storage Temperature: -50 to 150°C
- High Isolation Resistance From Case To Leads

**TABLE 1A - STANDARD DEVICE ELECTRICAL SPECIFICATIONS** (NOTE 1)

| SUSSEX PART NUMBER | MAX. AVERAGE FORWARD RECTIFIED OUTPUT CURRENT $T_{CASE}$=55 °C AMPS | MAX. INSTANTANEOUS FORWARD VOLTAGE PER BRIDGE ELEMENT | | MAX. LEAKAGE CURRENT $I_R$ @ $V_{DC}$ | | PEAK FORWARD SURGE CURRENT (NOTE 2) AMPS | MAX. RECURRENT PEAK REVERSE VOLTAGE ($V_{RRM}$) VOLTS | MAX. RMS INPUT VOLTAGE ($V_{RMS}$) VOLTS |
|---|---|---|---|---|---|---|---|---|
| | | FORWARD VOLTAGE TEST CURRENT ($I_F$) AMPS | PEAK FORWARD VOLTAGE @ $I_F$ VOLTS | $V_{DC}$ VOLTS | $I_R$ µA | | | |
| BDG-R6.0-50 | 6.0 | 6.0 | 1.0 | 50 | 5 | 250 | 50 | 35 |
| BDG-R6.0-100 | 6.0 | 6.0 | 1.0 | 100 | 5 | 250 | 100 | 70 |
| BDG-R6.0-200 | 6.0 | 6.0 | 1.0 | 200 | 5 | 250 | 200 | 140 |
| BDG-R6.0-400 | 6.0 | 6.0 | 1.0 | 400 | 5 | 250 | 400 | 280 |
| BDG-R6.0-600 | 6.0 | 6.0 | 1.0 | 600 | 5 | 250 | 600 | 420 |
| BDG-R6.0-800 | 6.0 | 6.0 | 1.0 | 800 | 5 | 250 | 800 | 560 |
| BDG-R6.0-1000 | 6.0 | 6.0 | 1.0 | 1000 | 5 | 250 | 1000 | 700 |
| BDG-R8.0-50 | 8.0 | 8.0 | 1.0 | 50 | 5 | 300 | 50 | 35 |
| BDG-R8.0-100 | 8.0 | 8.0 | 1.0 | 100 | 5 | 300 | 100 | 70 |
| BDG-R8.0-200 | 8.0 | 8.0 | 1.0 | 200 | 5 | 300 | 200 | 140 |
| BDG-R8.0-400 | 8.0 | 8.0 | 1.0 | 400 | 5 | 300 | 400 | 280 |
| BDG-R8.0-600 | 8.0 | 8.0 | 1.0 | 600 | 5 | 300 | 600 | 420 |
| BDG-R8.0-800 | 8.0 | 8.0 | 1.0 | 800 | 5 | 300 | 800 | 560 |
| BDG-R8.0-1000 | 8.0 | 8.0 | 1.0 | 1000 | 5 | 300 | 1000 | 700 |

### NOTES

**NOTE 1** ♦ELECTRICAL CHARACTERISTICS MEASURED AT 25°C UNLESS OTHERWISE STATED.

**NOTE 2** ♦PEAK FORWARD SURGE CURRENT MEASURED FROM A SINGLE SINE-WAVE BEING SUPERIMPOSED ON THE RATED LOAD (JEDEC METHOD).

**FIGURE 1A - BRIDGE RECTIFIER DERATING CURVE**

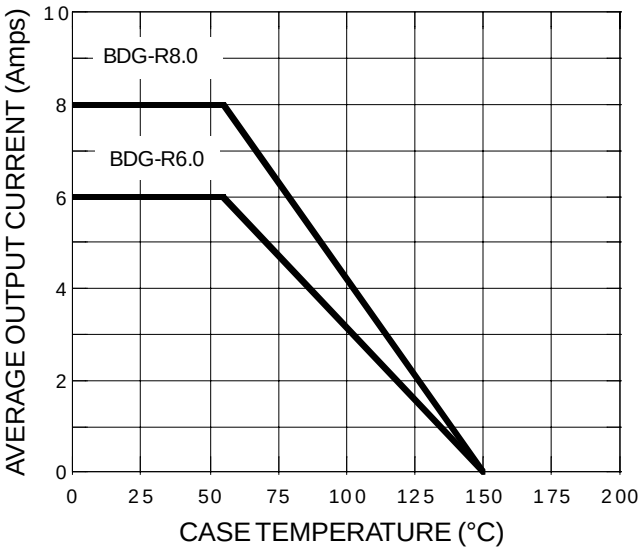



**FIGURE 2A - TYPICAL JUNCTION CAPACITANCE PER LEG**

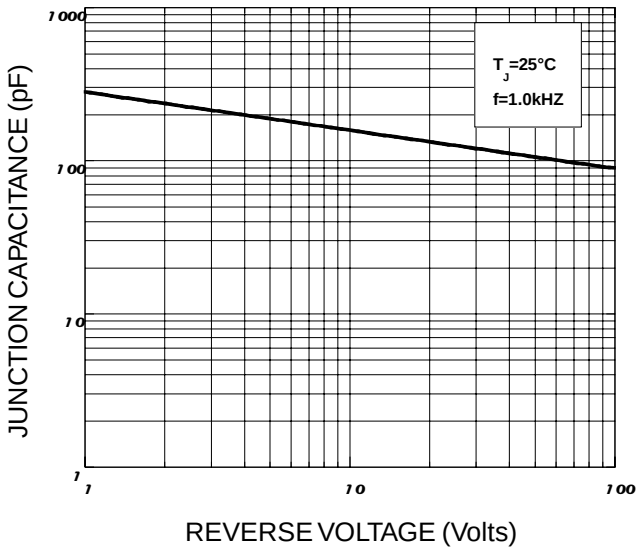



**FIGURE 3A - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER LEG**

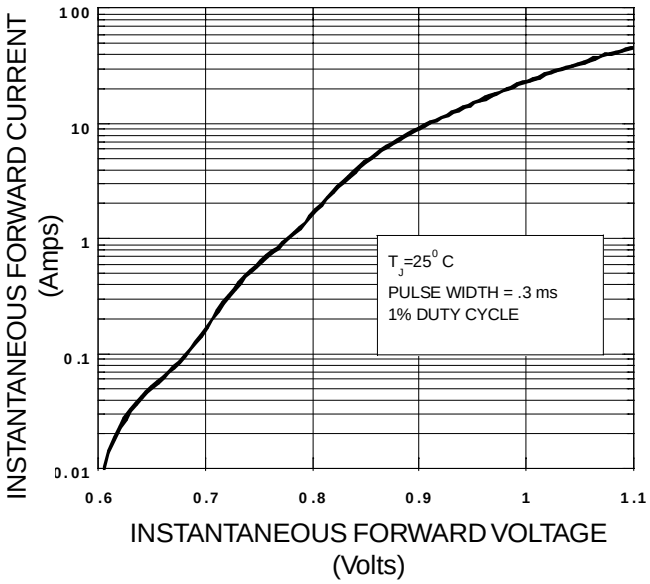
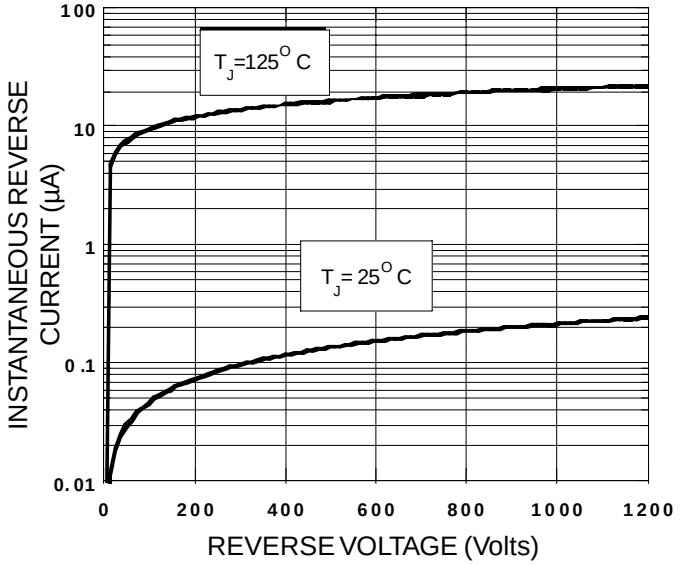



**FIGURE 4A - TYPICAL REVERSE VOLTAGE CHARACTERISTICS**



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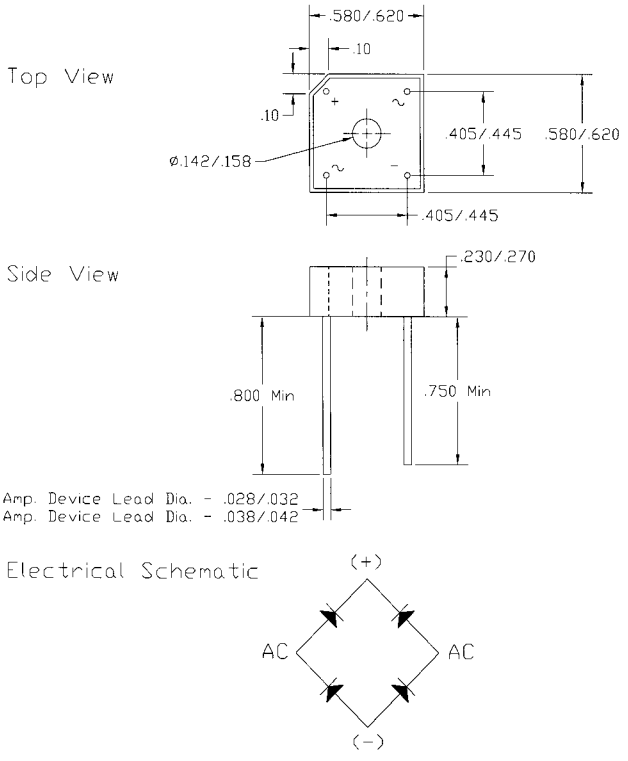
# 3.0 AND 6.0 AMP BRIDGE RECTIFIERS




**SINGLE - PHASE BRIDGE RECTIFIER**

**REVERSE VOLTAGES - 50 TO 1000 VOLTS**

**FORWARD CURRENT - 3.0 TO 6.0 AMPS**

## 3.0 AND 6.0 AMP BRIDGE RECTIFIER SPECIFICATIONS

- Plated Leads Guarantee Excellent Solderability
- Encapsulated In An Epoxy Filled Plastic Case
- Typical Leakage Current Less Than .1µA
- Ideal For Printed Circuit Boards
- Polarity Indicated By Solvent Resistant Marking
- Operating Temperature: -50 to 150°C
- Storage Temperature: -50 to 150°C
- High Isolation Resistance From Case To Leads

**TABLE 1A - STANDARD DEVICE ELECTRICAL SPECIFICATIONS** (NOTE 1)

| SUSSEX PART NUMBER | MAX. AVERAGE FORWARD RECTIFIED OUTPUT CURRENT $T_{CASE}$=55 °C AMPS | MAX. INSTANTANEOUS FORWARD VOLTAGE PER BRIDGE ELEMENT | | MAX. LEAKAGE CURRENT $I_R$ @ $V_{DC}$ | | PEAK FORWARD SURGE CURRENT (NOTE 2) AMPS | MAX. RECURRENT PEAK REVERSE VOLTAGE ($V_{RRM}$) VOLTS | MAX. RMS INPUT VOLTAGE ($V_{RMS}$) VOLTS |
|---|---|---|---|---|---|---|---|---|
| | | FORWARD VOLTAGE TEST CURRENT ($I_F$) AMPS | PEAK FORWARD VOLTAGE @ $I_F$ VOLTS | $V_{DC}$ VOLTS | $I_R$ µA | | | |
| BDG-SL3.0-50 | 3.0 | 1.5 | 1.0 | 50 | 5 | 60 | 50 | 35 |
| BDG-SL3.0-100 | 3.0 | 1.5 | 1.0 | 100 | 5 | 60 | 100 | 70 |
| BDG-SL3.0-200 | 3.0 | 1.5 | 1.0 | 200 | 5 | 60 | 200 | 140 |
| BDG-SL3.0-400 | 3.0 | 1.5 | 1.0 | 400 | 5 | 60 | 400 | 280 |
| BDG-SL3.0-600 | 3.0 | 1.5 | 1.0 | 600 | 5 | 60 | 600 | 420 |
| BDG-SL3.0-800 | 3.0 | 1.5 | 1.0 | 800 | 5 | 60 | 800 | 560 |
| BDG-SL3.0-1000 | 3.0 | 1.5 | 1.0 | 1000 | 5 | 60 | 1000 | 700 |
| BDG-SL6.0-50 | 6.0 | 3.0 | 1.0 | 50 | 5 | 175 | 50 | 35 |
| BDG-SL6.0-100 | 6.0 | 3.0 | 1.0 | 100 | 5 | 175 | 100 | 70 |
| BDG-SL6.0-200 | 6.0 | 3.0 | 1.0 | 200 | 5 | 175 | 200 | 140 |
| BDG-SL6.0-400 | 6.0 | 3.0 | 1.0 | 400 | 5 | 175 | 400 | 280 |
| BDG-SL6.0-600 | 6.0 | 3.0 | 1.0 | 600 | 5 | 175 | 600 | 420 |
| BDG-SL6.0-800 | 6.0 | 3.0 | 1.0 | 800 | 5 | 175 | 800 | 560 |
| BDG-SL6.0-1000 | 6.0 | 3.0 | 1.0 | 1000 | 5 | 175 | 1000 | 700 |

### NOTES

**NOTE 1** ♦ELECTRICAL CHARACTERISTICS MEASURED AT 25°C UNLESS OTHERWISE STATED.

**NOTE 2** ♦PEAK FORWARD SURGE CURRENT MEASURED FROM A SINGLE SINE-WAVE BEING SUPERIMPOSED ON THE RATED LOAD (JEDEC METHOD).

**FIGURE 1A - BRIDGE RECTIFIER DERATING CURVE**

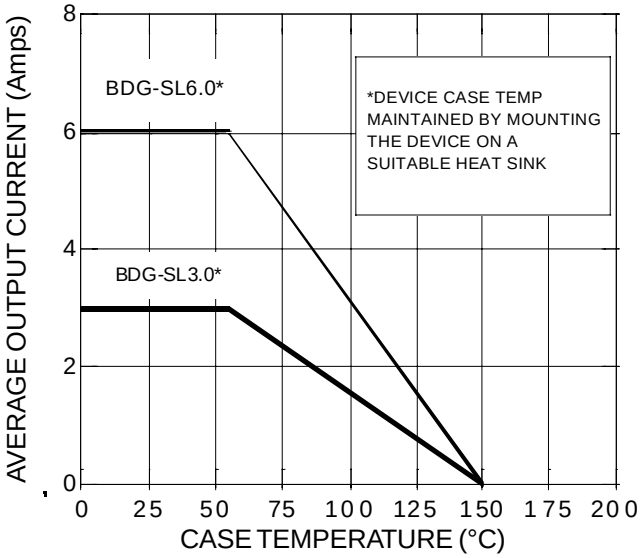



**FIGURE 2A - TYPICAL JUNCTION CAPACITANCE PER LEG**

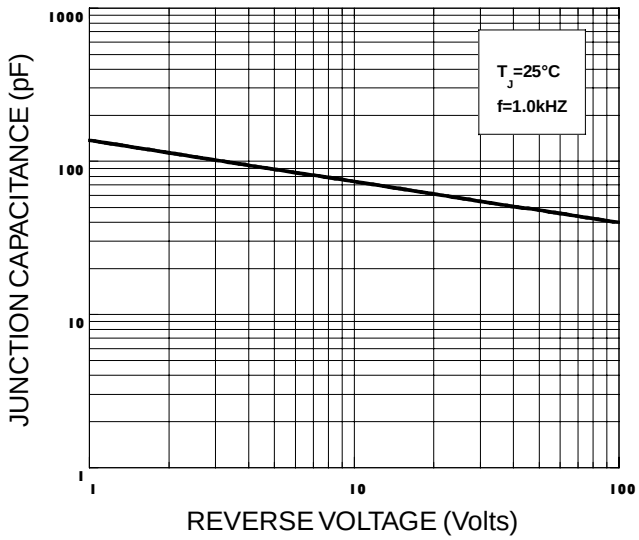



**FIGURE 3A - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER LEG**

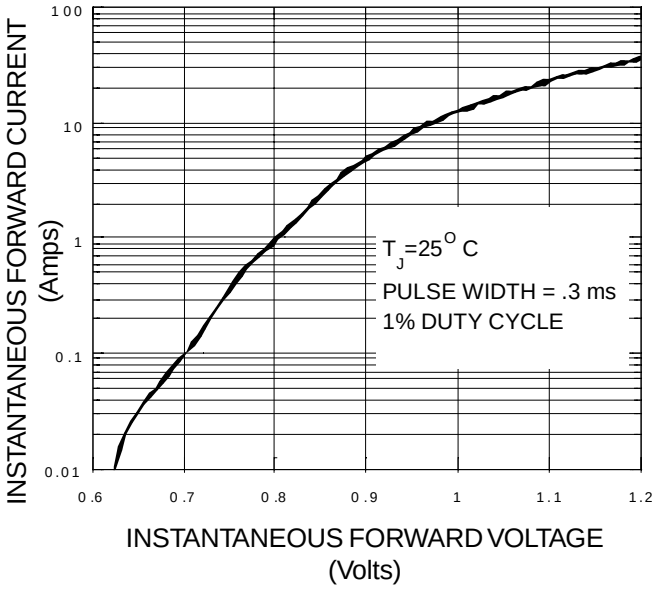
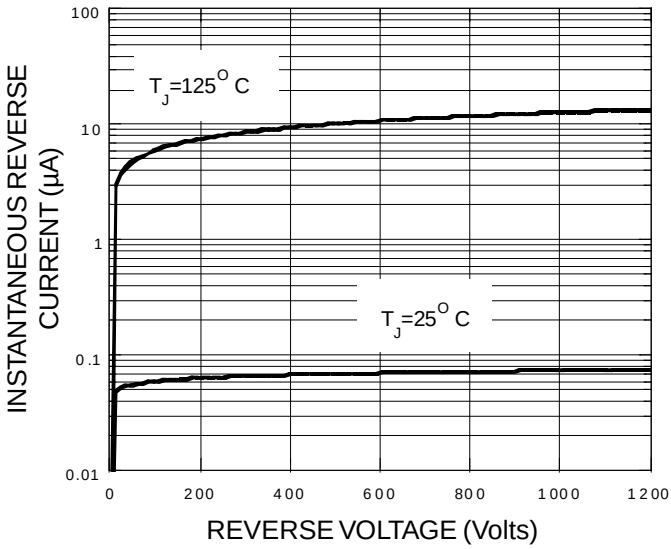



**FIGURE 4A - TYPICAL REVERSE VOLTAGE CHARACTERISTICS**



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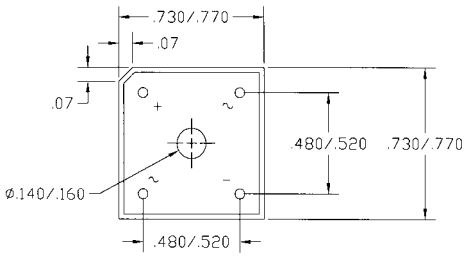
# 8.0 AND 10.0 AMP BRIDGE RECTIFIERS

**SINGLE - PHASE BRIDGE RECTIFIER**

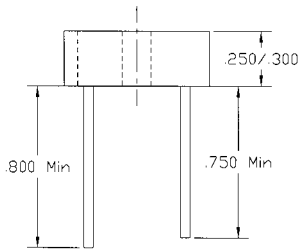
**REVERSE VOLTAGES - 50 TO 1000 VOLTS**

**FORWARD CURRENT - 8.0 TO 10.0 AMPS**

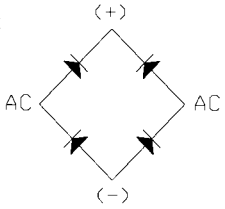
Top View




Side View




Electrical Schematic




All Dimensions In Inches

## 8.0 AND 10.0 AMP BRIDGE RECTIFIER SPECIFICATIONS

- Plated Leads Guarantee Excellent Solderability
- Encapsulated In An Epoxy Filled Plastic Case
- Typical Leakage Current Less Than .1µA
- Ideal For Printed Circuit Boards
- Polarity Indicated By Solvent Resistant Marking
- Operating Temperature: -50 to 150°C
- Storage Temperature: -50 to 150°C
- High Isolation Resistance From Case To Leads

**TABLE 1A - STANDARD DEVICE ELECTRICAL SPECIFICATIONS** (NOTE 1)

| SUSSEX PART NUMBER | MAX. AVERAGE FORWARD RECTIFIED OUTPUT CURRENT $T_{CASE}$=55 °C AMPS | MAX. INSTANTANEOUS FORWARD VOLTAGE PER BRIDGE ELEMENT | | MAX. LEAKAGE CURRENT $I_R$ @ $V_{DC}$ | | PEAK FORWARD SURGE CURRENT (NOTE 2) AMPS | MAX. RECURRENT PEAK REVERSE VOLTAGE ($V_{RRM}$) VOLTS | MAX. RMS INPUT VOLTAGE ($V_{RMS}$) VOLTS |
|---|---|---|---|---|---|---|---|---|
| | | FORWARD VOLTAGE TEST CURRENT ($I_F$) AMPS | PEAK FORWARD VOLTAGE @ $I_F$ VOLTS | $V_{DC}$ VOLTS | $I_R$ µA | | | |
| BDG-SL8.0-50 | 8.0 | 8.0 | 1.1 | 50 | 10 | 200 | 50 | 35 |
| BDG-SL8.0-100 | 8.0 | 8.0 | 1.1 | 100 | 10 | 200 | 100 | 70 |
| BDG-SL8.0-200 | 8.0 | 8.0 | 1.1 | 200 | 10 | 200 | 200 | 140 |
| BDG-SL8.0-400 | 8.0 | 8.0 | 1.1 | 400 | 10 | 200 | 400 | 280 |
| BDG-SL8.0-600 | 8.0 | 8.0 | 1.1 | 600 | 10 | 200 | 600 | 420 |
| BDG-SL8.0-800 | 8.0 | 8.0 | 1.1 | 800 | 10 | 200 | 800 | 560 |
| BDG-SL8.0-1000 | 8.0 | 8.0 | 1.1 | 1000 | 10 | 200 | 1000 | 700 |
| BDG-SL10.0-50 | 10.0 | 10.0 | 1.1 | 50 | 10 | 200 | 50 | 35 |
| BDG-SL10.0-100 | 10.0 | 10.0 | 1.1 | 100 | 10 | 200 | 100 | 70 |
| BDG-SL10.0-200 | 10.0 | 10.0 | 1.1 | 200 | 10 | 200 | 200 | 140 |
| BDG-SL10.0-400 | 10.0 | 10.0 | 1.1 | 400 | 10 | 200 | 400 | 280 |
| BDG-SL10.0-600 | 10.0 | 10.0 | 1.1 | 600 | 10 | 200 | 600 | 420 |
| BDG-SL10.0-800 | 10.0 | 10.0 | 1.1 | 800 | 10 | 200 | 800 | 560 |
| BDG-SL10.0-1000 | 10.0 | 10.0 | 1.1 | 1000 | 10 | 200 | 1000 | 700 |

### NOTES

**NOTE 1** ♦ELECTRICAL CHARACTERISTICS MEASURED AT 25°C UNLESS OTHERWISE STATED.

**NOTE 2** ♦PEAK FORWARD SURGE CURRENT MEASURED FROM A SINGLE SINE-WAVE BEING SUPERIMPOSED ON THE RATED LOAD (JEDEC METHOD).

**FIGURE 1A - BRIDGE RECTIFIER DERATING CURVE**

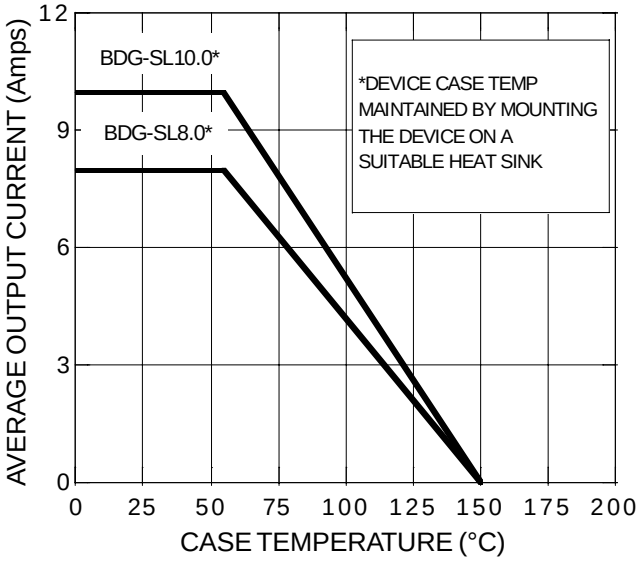



**FIGURE 2A - TYPICAL JUNCTION CAPACITANCE PER LEG**

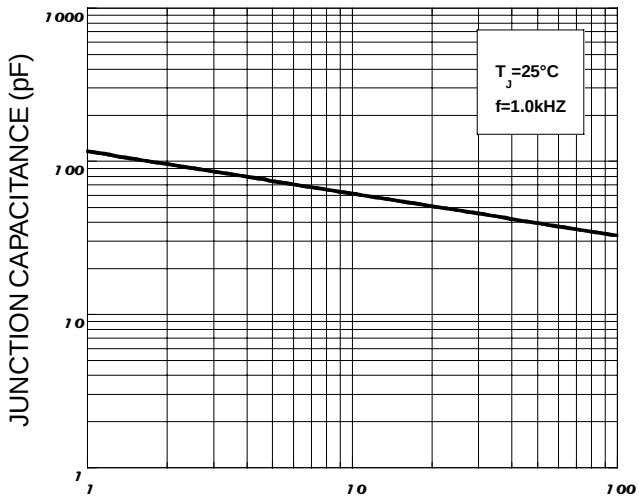



**FIGURE 3A - TYPICAL FORWARD CHARACTERISTICS PER LEG**

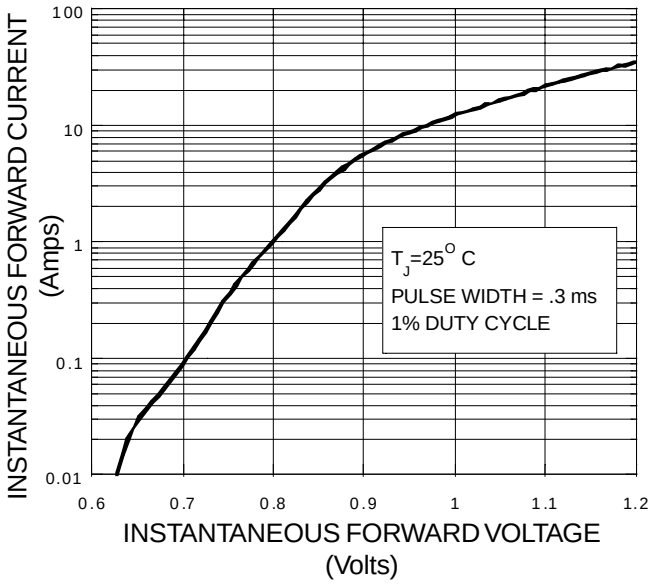
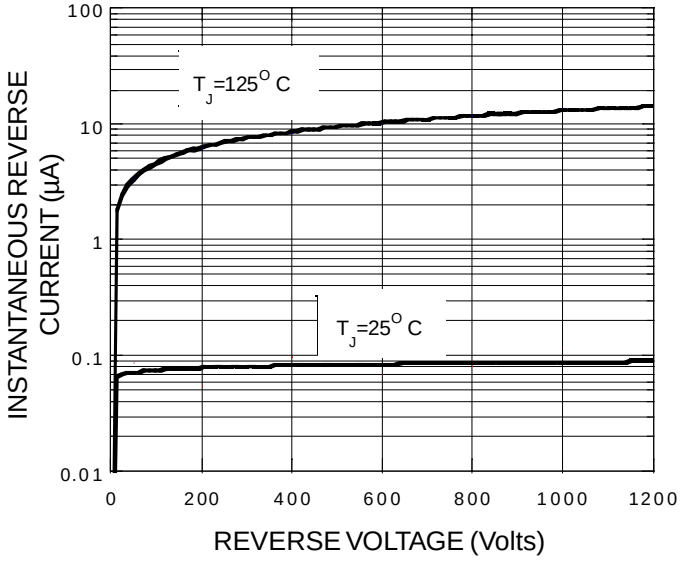



**FIGURE 4A - TYPICAL REVERSE VOLTAGE CHARACTERISTICS PER LEG**



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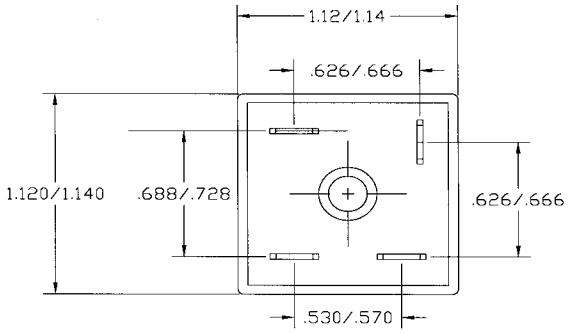
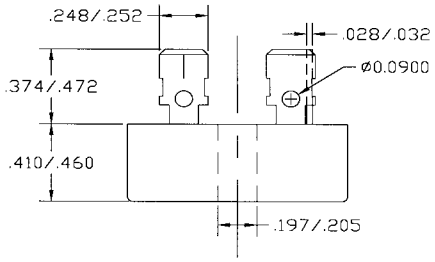
# 15 AMP BRIDGE RECTIFIERS

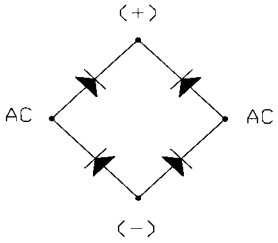
Top View




Side View




Electrical Schematic




All Dimensions In Inches

**GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER**

**REVERSE VOLTAGES - 50 TO 1000 VOLTS**

**FORWARD CURRENT - 15 AMPS**

## 15 AMP BRIDGE RECTIFIER DEVICE SPECIFICATIONS

- High Current Silicon Standard Recovery Bridge Rectifiers
- Universal Four- Way Terminals Designed With .250 Female Quick Connect
- Each Device Individually Inspected
- Polarity Indicated by Solvent Resistant Marking on Each Package
- Each Device Encapsulated on a Heat Sink
- Operating and Storage Temperature: -50 to +150 °C
- Maximum Thermal Resistance 1.2° C/W
- Isolation Resistance From Case to Leads 2500 VAC Min

**TABLE 1A - STANDARD DEVICE ELECTRICAL SPECIFICATIONS** (NOTE 1)

| SUSSEX PART NUMBER | MAX. AVERAGE FORWARD RECTIFIED OUTPUT CURRENT $T_{CASE}$=55 °C AMPS | MAX. INSTANTANEOUS FORWARD VOLTAGE PER BRIDGE ELEMENT | | MAX. LEAKAGE CURRENT $I_R$ @ $V_{DC}$ | | PEAK FORWARD SURGE CURRENT (NOTE 2) AMPS | MAX. RECURRENT PEAK REVERSE VOLTAGE ($V_{RRM}$) VOLTS | MAX. RMS INPUT VOLTAGE ($V_{RMS}$) VOLTS |
|---|---|---|---|---|---|---|---|---|
| | | FORWARD VOLTAGE TEST CURRENT ($I_F$) AMPS | PEAK FORWARD VOLTAGE @ $I_F$ VOLTS | $V_{DC}$ VOLTS | $I_R$ µA | | | |
| BDG-ST15.0-50 | 15 | 7.5 | 1.2 | 50 | 10 | 300 | 50 | 35 |
| BDG-ST15.0-100 | 15 | 7.5 | 1.2 | 100 | 10 | 300 | 100 | 70 |
| BDG-ST15.0-200 | 15 | 7.5 | 1.2 | 200 | 10 | 300 | 200 | 140 |
| BDG-ST15.0-400 | 15 | 7.5 | 1.2 | 400 | 10 | 300 | 400 | 280 |
| BDG-ST15.0-600 | 15 | 7.5 | 1.2 | 600 | 10 | 300 | 600 | 420 |
| BDG-ST15.0-800 | 15 | 7.5 | 1.2 | 800 | 10 | 300 | 800 | 560 |
| BDG-ST15.0-1000 | 15 | 7.5 | 1.2 | 1000 | 10 | 300 | 1000 | 700 |

**NOTES**

**NOTE 1** ♦ELECTRICAL CHARACTERISTICS MEASURED AT 25°C UNLESS OTHERWISE STATED.

**NOTE 2** ♦PEAK FORWARD SURGE CURRENT MEASURED FROM A SINGLE SINE-WAVE BEING SUPERIMPOSED ON THE RATED LOAD (JEDEC METHOD).

**FIGURE 1A - BRIDGE RECTIFIER DERATING CURVE**

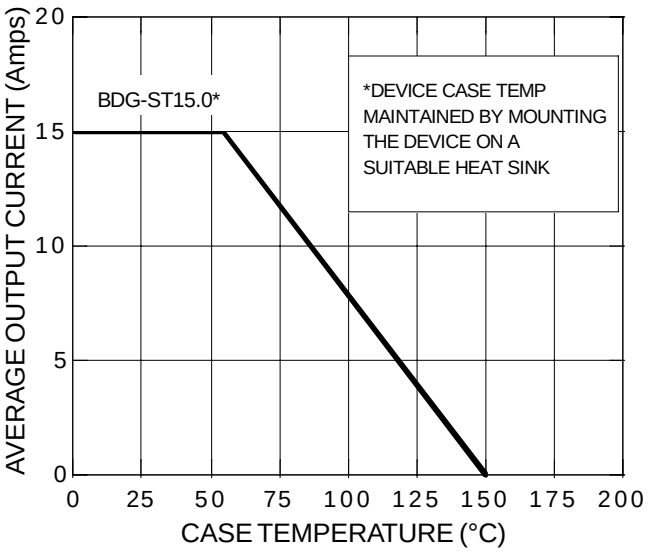



**FIGURE 2A - TYPICAL JUNCTION CAPACITANCE PER LEG**

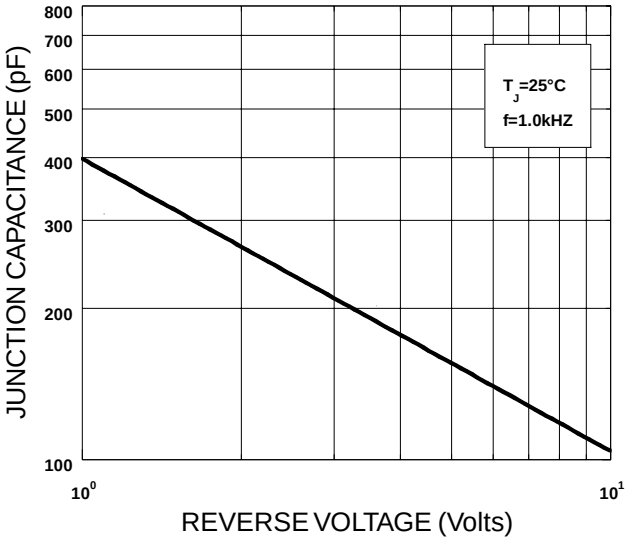



**FIGURE 3A - TYPICAL FORWARD CHARACTERISTICS PER LEG**

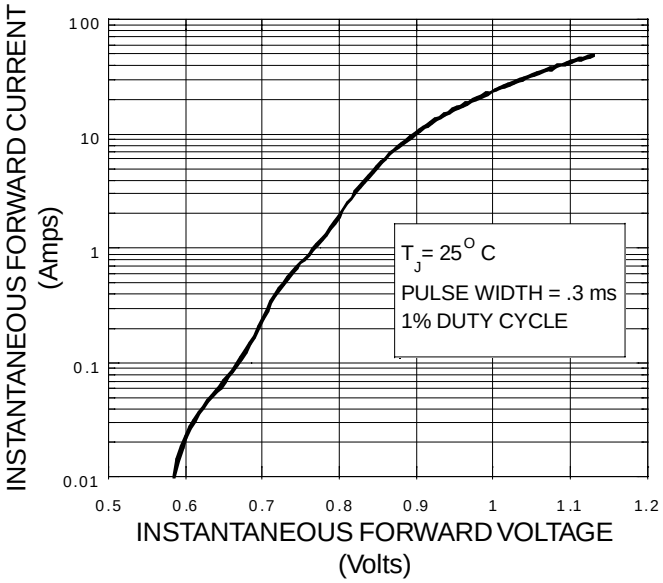
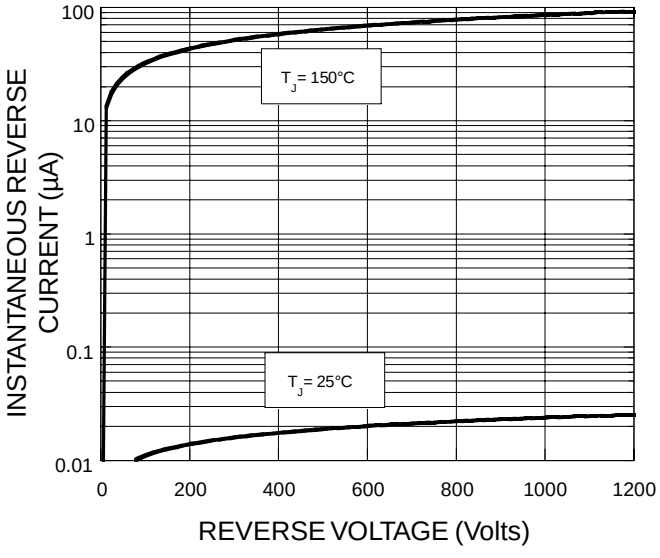



**FIGURE 4A - TYPICAL REVERSE CHARACTERISTICS PER LEG**



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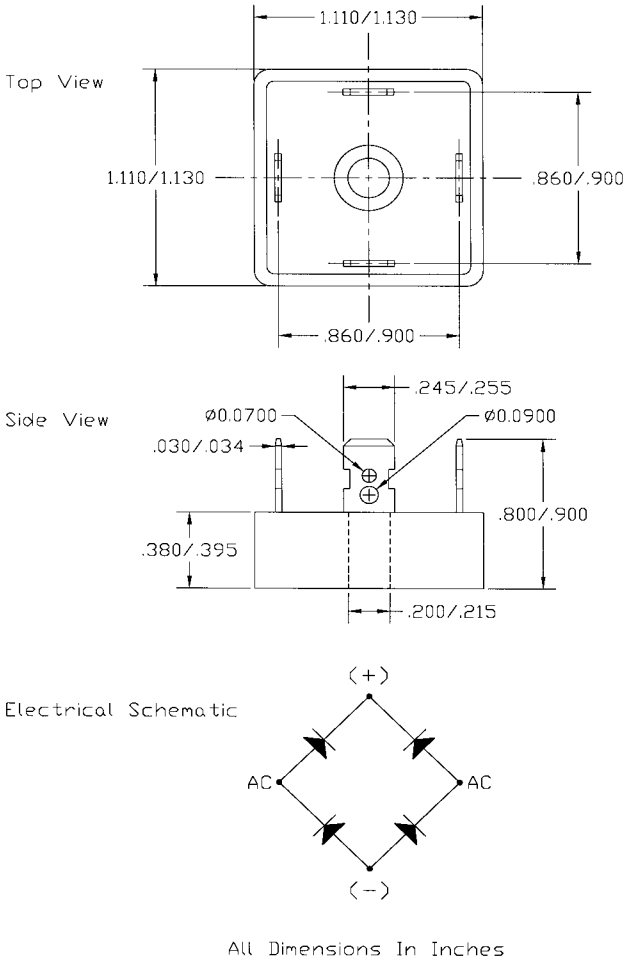
# 25-35 AMP BRIDGE RECTIFIERS




**GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER**

**REVERSE VOLTAGES - 50 TO 1000 VOLTS**

**FORWARD CURRENT - 25 TO 35 AMPS**

## 25 TO 35 AMP BRIDGE RECTIFIER DEVICE SPECIFICATIONS

- High Current Silicon Standard Recovery Bridge Rectifiers
- Universal Four- Way Terminals Designed With .250 Female Quick Connect
- Each Device Individually Inspected
- Polarity Indicated by Solvent Resistant Marking on Each Package
- Each Device Encapsulated on a Heat Sink
- Operating and Storage Temperature: -50 to +150 °C
- Maximum Thermal Resistance 1.2° C/W
- Isolation Resistance From Case to Leads 2500 VAC Min

**TABLE 1A - STANDARD DEVICE ELECTRICAL SPECIFICATIONS** (NOTE 1)

| SUSSEX PART NUMBER | MAX. AVERAGE FORWARD RECTIFIED OUTPUT CURRENT $T_{CASE}$=55 °C AMPS | MAX. INSTANTANEOUS FORWARD VOLTAGE PER BRIDGE ELEMENT | | MAX. LEAKAGE CURRENT $I_R$ @ $V_{DC}$ | | PEAK FORWARD SURGE CURRENT (NOTE 2) AMPS | MAX. RECURRENT PEAK REVERSE VOLTAGE ($V_{RRM}$) VOLTS | MAX. RMS INPUT VOLTAGE ($V_{RMS}$) VOLTS |
|---|---|---|---|---|---|---|---|---|
| | | FORWARD VOLTAGE TEST CURRENT ($I_F$) AMPS | PEAK FORWARD VOLTAGE @ $I_F$ VOLTS | $V_{DC}$ VOTLS | IR µA | | | |
| BDG-ST25-50 | 25 | 12.5 | 1.2 | 50 | 10 | 300 | 50 | 35 |
| BDG-ST25-100 | 25 | 12.5 | 1.2 | 100 | 10 | 300 | 100 | 70 |
| BDG-ST25-200 | 25 | 12.5 | 1.2 | 200 | 10 | 300 | 200 | 140 |
| BDG-ST25-400 | 25 | 12.5 | 1.2 | 400 | 10 | 300 | 400 | 280 |
| BDG-ST25-600 | 25 | 12.5 | 1.2 | 600 | 10 | 300 | 600 | 420 |
| BDG-ST25-800 | 25 | 12.5 | 1.2 | 800 | 10 | 300 | 800 | 560 |
| BDG-ST25-1000 | 25 | 12.5 | 1.2 | 1000 | 10 | 300 | 1000 | 700 |
| BDG-ST35-50 | 35 | 17.5 | 1.2 | 50 | 10 | 400 | 50 | 35 |
| BDG-ST35-100 | 35 | 17.5 | 1.2 | 100 | 10 | 400 | 100 | 70 |
| BDG-ST35-200 | 35 | 17.5 | 1.2 | 200 | 10 | 400 | 200 | 140 |
| BDG-ST35-400 | 35 | 17.5 | 1.2 | 400 | 10 | 400 | 400 | 280 |
| BDG-ST35-600 | 35 | 17.5 | 1.2 | 600 | 10 | 400 | 600 | 420 |
| BDG-ST35-800 | 35 | 17.5 | 1.2 | 800 | 10 | 400 | 800 | 560 |
| BDG-ST35-1000 | 35 | 17.5 | 1.2 | 1000 | 10 | 400 | 1000 | 700 |

### NOTES

**NOTE 1** ♦ELECTRICAL CHARACTERISTICS MEASURED AT 25°C UNLESS OTHERWISE STATED.

**NOTE 2** ♦PEAK FORWARD SURGE CURRENT MEASURED FROM A SINGLE SINE-WAVE BEING SUPERIMPOSED ON THE RATED LOAD (JEDEC METHOD).

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**FIGURE 1A - BRIDGE RECTIFIER DERATING CURVE**

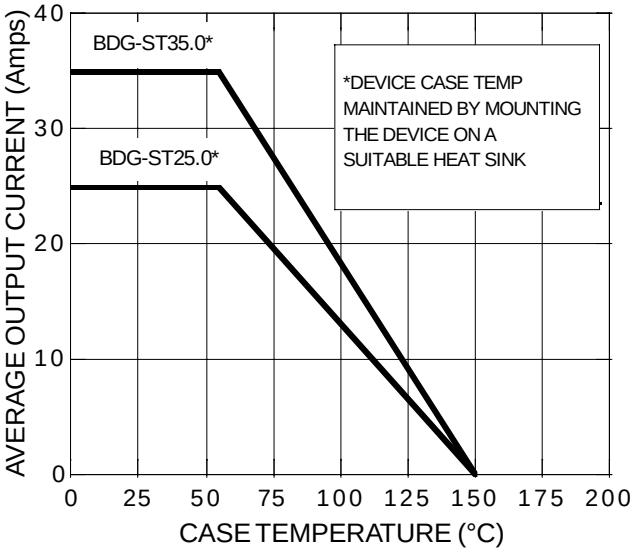


**FIGURE 2A - TYPICAL JUNCTION CAPACITANCE PER LEG**

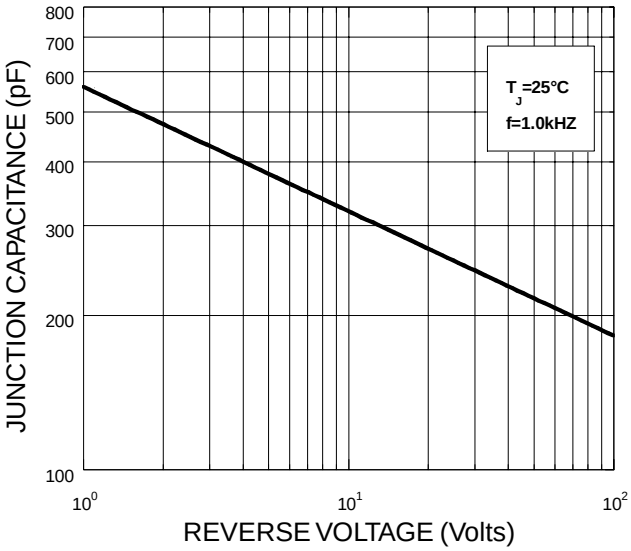


**FIGURE 3A - TYPICAL FORWARD CHARACTERISTICS PER LEG**

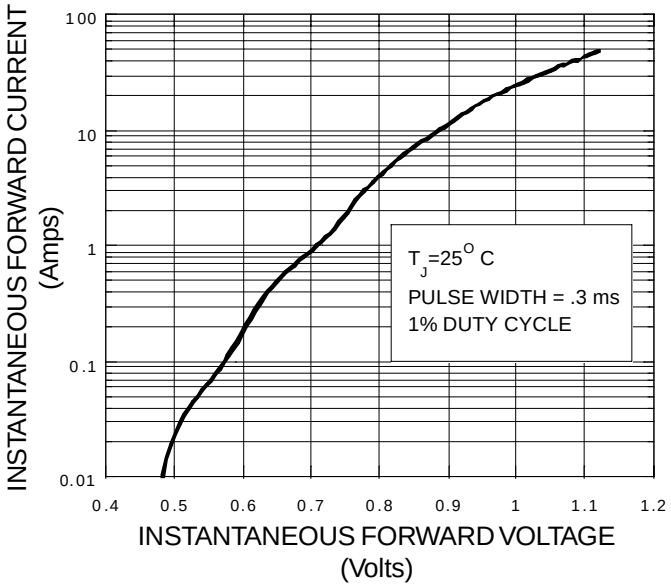


**FIGURE 4A - TYPICAL REVERSE CHARACTERISTICS PER LEG**