The A430 Series is General Electric's highly reliable, all-diffused Press-Pak 1000 ampere silicon rectifier diode.

FEATURES:
- Soft Reverse Recovery
- High Reverse Blocking Voltage Capability
- Pressure Contacts
- Package Reversibility
- Rugged, Glazed Ceramic Hermetic Package With 1" Creepage Path

### MAXIMUM ALLOWABLE RATINGS AND SPECIFICATIONS

<table>
<thead>
<tr>
<th>TYPES</th>
<th>REPETITIVE PEAK(^1) REVERSE VOLTAGE, (V_{RRM}) (T_J = -40^\circ)C to +200°C</th>
<th>NON-REPEITITIVE(^2) PEAK REVERSE VOLTAGE, (V_{RRM}) (T_J = 25^\circ)C to +200°C</th>
<th>DC REVERSE(^3) VOLTAGE, (V_R) (T_J = -40^\circ)C to +200°C</th>
<th>REPETITIVE PEAK REVERSE CURRENT (I_{RRM} @ V_{RRM}) (T_J = 200^\circ)C</th>
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</thead>
<tbody>
<tr>
<td>A430E</td>
<td>500 Volts</td>
<td>650 Volts</td>
<td>500 Volts</td>
<td>50 mA</td>
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<tr>
<td>A430PE</td>
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<td>1800</td>
<td>1500</td>
<td>50</td>
</tr>
</tbody>
</table>

Average Forward Current, \(I_{F(AV)}\) \((T_C = 115^\circ\)C, Single Phase, Half Sinewave, Double-Side Cooled\) \(= 1000\) Amperes

Peak One-Cycle Surge (Non-Repetitive) Forward Current, \(I_{FSM}\) \(= 10,000\) Amperes

Minimum \(I^2\)t Rating (for times \(\geq 1.5\) msec., Non-Repetitive) \(= 200,000\) (RMS Amperes) \(\sim 2\) Seconds

Minimum \(I^2\)t Rating (for times \(\geq 8.3\) msec., Non-Repetitive) \(= 415,000\) (RMS Amperes) \(\sim 2\) Seconds

Peak Forward Voltage Drop, \(V_{FM}\) \((I_{F(AV)} = 1000\) Amps; 3140 Amps. Peak, 115°C Case Temp., Single-Phase) \(= 1.42\) Volts

Maximum Thermal Resistance, \(R_{θJC}\), Double-Side Cooling \(= 0.06^\circ\)C/Watt

Storage Temperature, \(T_{stg}\) \(= -40^\circ\)C to +200°C

Operating Junction Temperature, \(T_J\) \(= -40^\circ\)C to +200°C

Mounting Force Required\(^4\) \(= 2000\) Lbs \(\pm 10\%\) \(= 8.9\) KN \(\pm 10\%

NOTES:
1. Assumes a heatsink thermal resistance of less than 1.1°C/watt.
2. Non-repetitive voltage and current ratings, as contrasted to repetitive ratings, apply for occasional or unpredictable overloads. For example, the forward surge current ratings are non-repetitive ratings that are used in fault coordination work.
3. Assumes a heatsink thermal resistance of less than 0.5°C/watt.
DEVICE SPECIFICATIONS

1. MAXIMUM FORWARD CHARACTERISTICS

2. MAXIMUM CASE TEMPERATURE VS. AVERAGE FORWARD CURRENT FOR DOUBLE-SIDE COOLING

3. AVERAGE FORWARD POWER DISSIPATION VS. AVERAGE FORWARD CURRENT

4. TRANSIENT THERMAL RESISTANCE - JUNCTION-TO-CASE
MOUNTING THE A430, ONE INCH PRESS-PAK
USING THE SERIES 2500 CLAMP

CLAMP FEATURES:

The General Electric Company offers the Series 2500 Press Pak, mounting clamp designed to facilitate single- or double-side cooling of all GE Press Pak's.

Special features of this clamp:

- Metal pivot insuring constant pressure in rugged applications over long periods.
- One-piece phenolic insulator gives 1" nominal creep distance.
- Use of special Force Indicator Gauge eliminates need for torque wrenches, inaccurate "flex" gauges, and guesswork.
- Various bolt lengths available to accommodate most mounting situations.
- No loose parts to complicate assembly.
- Stiffening brace to reinforce heat sink available upon request.
- Single-side cooling terminal available upon request.
- Positive, non-binding swivel action.