DESCRIPTION:
The CENTRAL SEMICONDUCTOR CMJ0130 series devices are silicon field effect current regulator diodes designed for applications requiring a constant current over a wide voltage range. These devices are manufactured in the epoxy molded, low profile SOD-123FL case. Special selections of Ip (regulator current) are available for critical applications.

MARKING: SEE MARKING CODES ON ELECTRICAL CHARACTERISTICS TABLE

FEATURES:
• High Reliability
• Superior Lot to Lot Consistency
• Special Selections Available
• Leaded Devices Available

MAXIMUM RATINGS: (TA=60°C)

<table>
<thead>
<tr>
<th>SYMBOL</th>
<th>UNITS</th>
<th>TYPE</th>
<th>REGULATOR CURRENT (Note 1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>POV</td>
<td>V</td>
<td>CMJ0130</td>
<td>Ip @ VT=25V</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>MIN mA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CMJ0300</td>
<td>0.05</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CMJ0500</td>
<td>0.20</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CMJ0750</td>
<td>0.40</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CMJ1000</td>
<td>0.60</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CMJ1500</td>
<td>0.88</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CMJ2000</td>
<td>1.28</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CMJ2700</td>
<td>1.68</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CMJ3500</td>
<td>2.28</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CMJ4500</td>
<td>3.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CMJ5750</td>
<td>3.9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CMJH080</td>
<td>5.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CMJH100</td>
<td>6.56</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CMJH120</td>
<td>8.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CMJH150</td>
<td>9.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CMJH180</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CMJH220</td>
<td>16</td>
</tr>
</tbody>
</table>

ELECTRICAL CHARACTERISTICS: (TA=25°C unless otherwise noted)

Notes:
1) Pulsed Method: Pulse Width (ms) = 27.5 divided by Ip NOM (mA)
2) The Temperature Coefficient is measured between +25°C and +50°C.
CMJ0130
THRU
CMJH220
SURFACE MOUNT SILICON
CURRENT LIMITING DIODES

SOD-123FL CASE - MECHANICAL OUTLINE

LEAD CODE:
1) Cathode
2) Anode

MARKING: SEE ELECTRICAL
CHARACTERISTICS TABLE

<table>
<thead>
<tr>
<th>SYMBOL</th>
<th>INCHES</th>
<th>MILLIMETERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>0.024</td>
<td>0.60</td>
</tr>
<tr>
<td>B</td>
<td>0.020</td>
<td>0.50</td>
</tr>
<tr>
<td>C</td>
<td>0.003</td>
<td>0.08</td>
</tr>
<tr>
<td>D</td>
<td>0.059</td>
<td>1.50</td>
</tr>
<tr>
<td>E</td>
<td>0.094</td>
<td>2.40</td>
</tr>
<tr>
<td>F</td>
<td>0.130</td>
<td>3.30</td>
</tr>
<tr>
<td>G</td>
<td>0.031</td>
<td>0.80</td>
</tr>
</tbody>
</table>

SOD-123FL (REV:R0)

R5 (15-August 2018)
TYPICAL ELECTRICAL CHARACTERISTICS

Regulator Current vs Voltage

Nominal Regulator Current vs Temperature
OUTSTANDING SUPPORT AND SUPERIOR SERVICES

PRODUCT SUPPORT
Central’s operations team provides the highest level of support to insure product is delivered on-time.
• Supply management (Customer portals)
• Inventory bonding
• Consolidated shipping options
• Custom bar coding for shipments
• Custom product packing

DESIGNER SUPPORT/SERVICES
Central’s applications engineering team is ready to discuss your design challenges. Just ask.
• Free quick ship samples (2nd day air)
• Online technical data and parametric search
• SPICE models
• Custom electrical curves
• Environmental regulation compliance
• Customer specific screening
• Up-screening capabilities
• Special wafer diffusions
• PbSn plating options
• Package details
• Application notes
• Application and design sample kits
• Custom product and package development

REQUESTING PRODUCT PLATING
1. If requesting Tin/Lead plated devices, add the suffix “ TIN/LEAD” to the part number when ordering (example: 2N2222A TIN/LEAD).
2. If requesting Lead (Pb) Free plated devices, add the suffix “ PBFREE” to the part number when ordering (example: 2N2222A PBFREE).

CONTACT US
Corporate Headquarters & Customer Support Team
Central Semiconductor Corp.
145 Adams Avenue
Hauppauge, NY 11788 USA
Main Tel: (631) 435-1110
Main Fax: (631) 435-1824
Support Team Fax: (631) 435-3388
www.centralsemi.com

Worldwide Field Representatives:
www.centralsemi.com/wwreps

Worldwide Distributors:
www.centralsemi.com/wwdistributors

For the latest version of Central Semiconductor’s LIMITATIONS AND DAMAGES DISCLAIMER, which is part of Central’s Standard Terms and Conditions of sale, visit: www.centralsemi.com/terms