DESCRIPTION:
The CENTRAL SEMICONDUCTOR CMSH2-20M series 2.0 Amp surface mount silicon Schottky rectifier is a well constructed, highly reliable component designed for use in all types of commercial, industrial, entertainment, computer, and automotive applications.

MARKING CODE: SEE MARKING CODE TABLE ON FOLLOWING PAGE

FEATURES:
• High current capability
• Flammability classification UL94V-0
• High reliability

MAXIMUM RATINGS: (T_A=25°C unless otherwise noted)

<table>
<thead>
<tr>
<th>SYMBOL</th>
<th>CMSH2-20M</th>
<th>CMSH2-40M</th>
<th>CMSH2-60M</th>
<th>CMSH2-100M</th>
</tr>
</thead>
<tbody>
<tr>
<td>V_RRM</td>
<td>20</td>
<td>40</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>V_R</td>
<td>20</td>
<td>40</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>V_R(RMS)</td>
<td>14</td>
<td>28</td>
<td>42</td>
<td>71</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>SYMBOL</th>
<th>TEST CONDITIONS</th>
<th>SYMBOL</th>
<th>TEST CONDITIONS</th>
<th>TYP</th>
<th>MAX</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>I_R</td>
<td>V_R=Rated V_RRM</td>
<td></td>
<td></td>
<td></td>
<td>0.50</td>
<td>mA</td>
</tr>
<tr>
<td>I_R</td>
<td>V_R=Rated V_RRM, T_A=100°C</td>
<td></td>
<td></td>
<td></td>
<td>20</td>
<td>mA</td>
</tr>
<tr>
<td>V_F</td>
<td>I_F=2.0A (CMSH2-20M)</td>
<td></td>
<td></td>
<td>0.44</td>
<td>0.55</td>
<td>V</td>
</tr>
<tr>
<td>V_F</td>
<td>I_F=2.0A (CMSH2-40M)</td>
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<td></td>
<td>0.47</td>
<td>0.55</td>
<td>V</td>
</tr>
<tr>
<td>V_F</td>
<td>I_F=2.0A (CMSH2-60M)</td>
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<td></td>
<td>0.53</td>
<td>0.70</td>
<td>V</td>
</tr>
<tr>
<td>V_F</td>
<td>I_F=2.0A (CMSH2-100M)</td>
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<td></td>
<td>0.76</td>
<td>0.85</td>
<td>V</td>
</tr>
<tr>
<td>C_J</td>
<td>V_R=4.0V, f=1.0MHz (CMSH2-20M)</td>
<td>139</td>
<td></td>
<td></td>
<td></td>
<td>pF</td>
</tr>
<tr>
<td>C_J</td>
<td>V_R=4.0V, f=1.0MHz (CMSH2-40M)</td>
<td>101</td>
<td></td>
<td></td>
<td></td>
<td>pF</td>
</tr>
<tr>
<td>C_J</td>
<td>V_R=4.0V, f=1.0MHz (CMSH2-60M)</td>
<td>94</td>
<td></td>
<td></td>
<td></td>
<td>pF</td>
</tr>
<tr>
<td>C_J</td>
<td>V_R=4.0V, f=1.0MHz (CMSH2-100M)</td>
<td>74</td>
<td></td>
<td></td>
<td></td>
<td>pF</td>
</tr>
</tbody>
</table>
TYPICAL ELECTRICAL CHARACTERISTICS

Leakage Current for CMSH2-20M

Leakage Current for CMSH2-40M

Leakage Current for CMSH2-60M

Leakage Current for CMSH2-100M
TYPICAL ELECTRICAL CHARACTERISTICS

Forward Voltage for CMSH2-20M

Forward Voltage for CMSH2-40M

Forward Voltage for CMSH2-60M

Forward Voltage for CMSH2-100M

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TYPICAL ELECTRICAL CHARACTERISTICS

Capacitance for CMSH2-20M

Capacitance for CMSH2-40M

Capacitance for CMSH2-60M

Capacitance for CMSH2-100M
TYPICAL ELECTRICAL CHARACTERISTICS

**CMSH2-20M**  **CMSH2-60M**
**CMSH2-40M**  **CMSH2-100M**

SURFACE MOUNT SILICON SCHOTTKY RECTIFIERS
2.0 AMP, 20 THRU 100 VOLT

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**Current Derating**

- $I_0$, Average Forward Current (A)
- $T_L$, Lead Temperature (°C)

**Power Derating**

- $P_D$, Power Dissipation (Watts)
- $T_A$, Ambient Temperature (°C)
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).

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