Automotive Electronics
Product Information
CJ260
Monolithic B6 Bridge for Automotive Actuators

Features
- Output stage with high side and low side drivers
- No charge pump and respective capacitor
- H-Bridge mode for DC motors
- Recovery strategies after incidents
- Slew rate control, four stages
- Output tri-state-mode in idle

Communication interface
- SPI
- Compatible with 3.3 and 5V logic µC
- Stands 18V over-voltage

Output stage protection against
- Uncontrolled activation of half-bridges
- Excessive / low supply voltage
- Over-current, especially in load dump
- Thermal damage
- Short and open load

At a glance:
- Complete B6 bridge for automotive BLDC applications
- Integrated drivers
- High efficiency, low weight
- Peak power for high initial torque
- Powerful continuous drive
- Lowest electromagnetic emission
- Direct µC control
- Diagnosis and recovery functions
- Dual release concept for safety

Package
- PowerSSO-36
- Pitch 0.5mm
- Body 7.5 mm x 10.3 mm
- Power Pins ESD 4kV HBM w/o ext protection

![Diagram of CJ260 monolithic B6 bridge](image)
Key Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power stage active at</td>
<td>4.5 V .. 28 V</td>
</tr>
<tr>
<td>Load dump pulse robustness</td>
<td>40 V</td>
</tr>
<tr>
<td>Inverse current robustness on $V_s$</td>
<td>5 A</td>
</tr>
<tr>
<td>Half bridge resistance at 3A, 150°C</td>
<td>max. 540 mΩ</td>
</tr>
<tr>
<td>Current limit setting, 3 ranges</td>
<td>5A .. 8.6 A</td>
</tr>
<tr>
<td>Continuous VS load current</td>
<td>3 A&lt;sub&gt;rms&lt;/sub&gt;</td>
</tr>
<tr>
<td>Digital supply voltage</td>
<td>4.5 V .. 5.25 V</td>
</tr>
<tr>
<td>Junction temperature</td>
<td>-40 °C .. 150 °C</td>
</tr>
<tr>
<td>Output switching frequency</td>
<td>max. 20 kHz</td>
</tr>
<tr>
<td>Output rise/fall slew rate set at 3A</td>
<td>typ. 1.7 .. 45 V/μs</td>
</tr>
</tbody>
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Potential applications

- Throttle valve
- General Purpose Actuator
- Engine Compartment Actuator
- Electric Gearbox Oil Pump
- Accelerator Pedal Module
- Window Lifter Electronic Control Unit
- Sunroof Electronic Control Unit
- Windshield Electronic Control Unit
- Auxiliary Pump
- Pump Control Electronic
- Fuel Supply Module
- Electric fuel pump tank installation unit

All document: Target values, subject to change without notice

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