Most Compact Design in Class Operation up to 1500V DC-Link

Coated PV Version Available

SKYPER® 12 Core

1.3W & 20A_{peak} per channel

Up to 100kHz
SKYPER 12 Core portfolio

<table>
<thead>
<tr>
<th>Driver type</th>
<th>$P_{out}$ per channel</th>
<th>$Q_{out}$ per channel</th>
<th>$I_{out(peak)}$</th>
<th>$f_{max}$</th>
<th>$V_{DC}$</th>
<th>$V_{isol}$</th>
<th>No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SKYPER 12 R</td>
<td>1.3W</td>
<td>20µC</td>
<td>20A</td>
<td>100kHz</td>
<td>1200V</td>
<td>5kV</td>
<td>L5069901</td>
</tr>
<tr>
<td>SKYPER 12 PV R (coated)</td>
<td>1.3W</td>
<td>20µC</td>
<td>20A</td>
<td>100kHz</td>
<td>1500V</td>
<td>5kV</td>
<td>L5070901</td>
</tr>
</tbody>
</table>

Small and strong
- 20A peak output current capability per channel
- Extended isolation transformer design for PV requirements
- Latest ASIC chipset for up to 12 million hours MTBF at full load
- Short circuit SoftOff operation mode
- Dynamic short circuit detection (DSCP)
- Undervoltage lockout on primary and secondary sides (UVLO)

Fast design: Evaluation boards are available for many standard modules
- Application samples for SEMiX 5 NPC/TNPC Press-Fit modules
- Safe semiconductor turn-off in any short circuit condition
- Reference circuits for SEMiX5 modules and SKYPER12 core drivers for up to 1500V

Meets PV application requirements
- Varnished with UL registered conformal coating material
- Extended max DC-Link voltage of up to 1500V
- Compliant with DIN EN 62109-1 and VDE 0126-14-1:2011-04

Key features
- Operation up to 1500V DC-link
- Dynamic short circuit detection (DSCP)
- Soft short circuit turn-off with dedicated output stage (SoftOff)
- Selectable input filter time
- dV/dt robust pulse transmission for strong EMC immunity
- Safe undervoltage turn-off with prim. and sec. voltage monitoring (UVLO)
- Isolated error input for e.g. overtemperature or overvoltage lockout
- Secondary side isolated power supply included