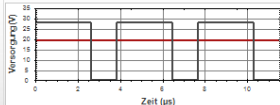


# Buck Converter

$U_{in} = 24 - 31 \text{ V}$   
 $U_{out} = 19 \text{ V}$   
 $I_{out} = 3.5 \text{ A} \pm 40 \%$   
 $DC = 0.68$   
 $t_{on} = 2.63 \mu\text{s}$   
 $L_{opt} = 16.89 \mu\text{H}$   
 $f = 260 \text{ kHz}$

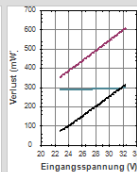
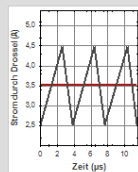


Einstellungen



Drossel WE-PD 744771112 in der Anwendung

$I_{peak} = 4.49 \text{ A}$   
 $\Delta I_L = 1.97 \text{ A}$   
 $Temp. Rise = 52 \text{ K}$   
 $DC Loss = 289 \text{ mW}$   
 $Core Loss = 197 \text{ mW}$   
 $Total Loss = 486 \text{ mW}$

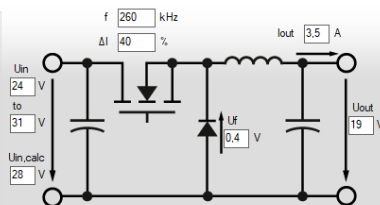


| Speicherdrossel-Typ             | Serie   | Bauform | Bestellnummer | Induktivität | Rdc Typ | Nennstrom | Sättigungsstrom | Länge   | Breite  | Höhe    | Betriebstemp. | Q+ Produ |
|---------------------------------|---------|---------|---------------|--------------|---------|-----------|-----------------|---------|---------|---------|---------------|----------|
| <input type="checkbox"/> Single | WE-PD   | 1280    | 744771112     | 12.0 μH      | 23.0 mΩ | 3.9 A     | 4.9 A           | 12.0 mm | 12.0 mm | 5.8 mm  | 125.0 °C      | no       |
| <input type="checkbox"/> Single | WE-PD   | 1280    | 744770112     | 12.0 μH      | 21.0 mΩ | 5.9 A     | 6.3 A           | 12.0 mm | 12.0 mm | 7.8 mm  | 125.0 °C      | no       |
| <input type="checkbox"/> Single | WE-HCI  | 2212    | 74435581200   | 12.0 μH      | 4.3 mΩ  | 19.0 A    | 25.0 A          | 22.5 mm | 22.0 mm | 12.0 mm | 125.0 °C      | no       |
| <input type="checkbox"/> Single | WE-PDF  | 1064    | 7447798131    | 13.0 μH      | 19.9 mΩ | 5.9 A     | 4.5 A           | 10.2 mm | 10.2 mm | 6.1 mm  | 150.0 °C      | no       |
| <input type="checkbox"/> Single | WE-HCI  | 1365    | 7443551131    | 13.0 μH      | 11.0 mΩ | 10.0 A    | 9.0 A           | 13.2 mm | 12.8 mm | 6.2 mm  | 155.0 °C      | no       |
| <input type="checkbox"/> Single | WE-PD   | 1260    | 7447711115    | 15.0 μH      | 25.0 mΩ | 3.8 A     | 4.6 A           | 12.0 mm | 12.0 mm | 5.8 mm  | 125.0 °C      | no       |
| <input type="checkbox"/> Single | WE-PD   | 1280    | 7447701115    | 15.0 μH      | 24.0 mΩ | 5.0 A     | 6.0 A           | 12.0 mm | 12.0 mm | 7.8 mm  | 125.0 °C      | no       |
| <input type="checkbox"/> Single | WE-PD   | 1210    | 7447709150    | 15.0 μH      | 20.0 mΩ | 7.0 A     | 8.0 A           | 12.0 mm | 12.0 mm | 9.8 mm  | 125.0 °C      | no       |
| <input type="checkbox"/> Single | WE-HCI  | 1890    | 74435571500   | 15.0 μH      | 9.0 mΩ  | 14.0 A    | 14.0 A          | 18.3 mm | 18.2 mm | 8.9 mm  | 125.0 °C      | no       |
| <input type="checkbox"/> Single | WE-HCF  | 2013    | 7443631500    | 15.0 μH      | 8.7 mΩ  | 14.0 A    | 21.0 A          | 20.5 mm | 20.0 mm | 13.5 mm | 125.0 °C      | no       |
| <input type="checkbox"/> Single | WE-HCF  | 2818    | 7443641500    | 15.0 μH      | 2.4 mΩ  | 30.0 A    | 26.0 A          | 28.0 mm | 28.5 mm | 18.5 mm | 125.0 °C      | no       |
| <input type="checkbox"/> Single | WE-LHMI | 1040    | 74437368150   | 15.0 μH      | 40.0 mΩ | 4.1 A     | 8.5 A           | 11.0 mm | 10.0 mm | 3.8 mm  | 125.0 °C      | no       |
| <input type="checkbox"/> Single | WE-FAMI | 8010    | 744750230150  | 15.0 μH      | 27.9 mΩ | 3.7 A     | 5.7 A           | 8.8 mm  | 8.8 mm  | 11.0 mm | 125.0 °C      | no       |
| <input type="checkbox"/> Single | WE-FAMI | 1012    | 744750340150  | 15.0 μH      | 17.2 mΩ | 5.6 A     | 8.5 A           | 10.8 mm | 10.8 mm | 13.0 mm | 125.0 °C      | no       |
| <input type="checkbox"/> Single | WE-FAMI | 1280    | 744750420150  | 15.0 μH      | 21.3 mΩ | 5.1 A     | 7.9 A           | 12.8 mm | 12.8 mm | 9.0 mm  | 125.0 °C      | no       |
| <input type="checkbox"/> Single | WE-HCI  | 1365    | 7443551151    | 15.4 μH      | 14.0 mΩ | 9.0 A     | 8.0 A           | 13.2 mm | 12.8 mm | 6.2 mm  | 155.0 °C      | no       |
| <input type="checkbox"/> Single | WE-HCI  | 1050    | 7443251600    | 16.0 μH      | 34.5 mΩ | 5.0 A     | 6.5 A           | 10.5 mm | 10.2 mm | 4.7 mm  | 150.0 °C      | no       |
| <input type="checkbox"/> Single | WE-PD   | 1280    | 7447701118    | 18.0 μH      | 32.0 mΩ | 4.2 A     | 5.4 A           | 12.0 mm | 12.0 mm | 7.8 mm  | 125.0 °C      | no       |
| <input type="checkbox"/> Single | WE-HCI  | 1365    | 7443551181    | 18.0 μH      | 22.0 mΩ | 7.5 A     | 7.5 A           | 13.2 mm | 12.8 mm | 6.2 mm  | 155.0 °C      | no       |

## Schaltnetzteil

Netzteil-Typ

- ☒ Buck Converter
- ☐ Boost Converter
- ☐ SEPIC Converter
- ☐ Calculate Losses



Netzteil Details

$L_{opt} = 16.89 \mu\text{H}$   
 $I_{rms} = 3.500 \text{ A}$   
 $V_t = 0.683$   
 $t_{on} = 2.62 \mu\text{s}$

Anwenden

Verwerfen

Abbrechen

