## InnoSwitch"3-AQ

- Wide input voltage range: 30 V to 1200 V
- Supports 400 V and 800 V DC bus
- Up to 90\% efficient across load
- Integrated FluxLink"' feedback
- Eliminates opto-isolator
- AEC-Q100 qualified

CV/CC Quasi-Resonant Flyback Switcher IC with Integrated 750 V, 900 V or 1700 V MOSFET and FluxLink Feedback for Automotive BEV and PHEV Applications


PI-8184a-031320

## Applications

Auxiliary, standby and bias power supplies for:

- Traction inverters
- Power distribution units (PDUs)
- DC-DC bus converters
- On-board chargers
- Battery management systems


## Output Power

| Part Number | $\mathrm{V}_{\text {DS(Max) }}$ <br> $(\mathrm{V})$ | $\mathrm{P}_{\text {OUT }}$ at 30 VDC <br> $(\mathrm{W})$ | $\mathrm{P}_{\text {OUT }}$ at 60 VDC <br> $(\mathrm{W})$ | $\mathrm{P}_{\text {OUT }}$ at 400 VDC <br> $(W)$ | $\mathrm{P}_{\text {OUT }}$ at 800 VDC <br> $(W)$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| INN3947CQ | 1700 | 10 | 23 | 50 | 50 |
| INN3949CQ | 1700 | 10 | 40 | 70 | 70 |
| INN3977CQ | 750 | 10 | 20 | 30 | N/A |
| INN3996CQ | 900 | 7 | 14 | 20 | N/A |



InSOP" ${ }^{\text {" }}$-24D Package

## Design Support

| Data Sheet | InnoSwitch3-AQ data sheet for $750 \mathrm{~V}, 900 \mathrm{~V}$ and 1700 V rated devices <br> (www.power.com/innoswitch3-aq-data-sheet) <br> 60 W isolated flyback power supply for 800 V automotive bus (RDK-919Q) <br> (www.power.com/rdk-919q) |
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| Design Kit | 60 W isolated flyback power supply for 800 V automotive bus (RDR-919Q) <br> (www.power.com/rdr-919q) |
| Design Report | 35 W isolated flyback power supply for 800 V automotive bus (DER-913Q) <br> (www.power.com/der-913q) |
| Design Example | 13 W triple output isolated Flyback power supply for 400 V automotive bus (DER-926Q) <br> (www.power.com/der-926Q) |
| Design Example | 30 W, wide input range power supply for automotive applications (DER-840Q) <br> (www.power.com/der-840q) |
| Design Example | 800 V automotive emergency power supply solution (EPS) <br> (www.power.com/innoswitch3-aq-video) |
| Video |  |

