

Surface Mount, Low Power DC/DC Converters for Ethernet Applications: 80Z0509XSMD and 80Z1209XSMD



Microminiature DC/DC Converters for Ethernet

Key Features

- All Pulse components are manufactured in ISO 9000 registered facilities to meet the highest international standards
- High MTBF due to low parts count
- 100% burn-in at 70°C
- 100% tested on ATE
- Surface mount assembly technology
- High efficiency ratings
- Operating temperature is 0° to 70°C
- Enable function provides power down feature
- Ideal for motherboard, pocket LAN, PCMCIA LAN card applications
- Continuous short circuit protection

Surface Mount

- Designed and tested to withstand I.R. profiles
- Pick and place compatible
- Molded for high integrity
- 16-pin package
- Available in tubes; tape and reel optional

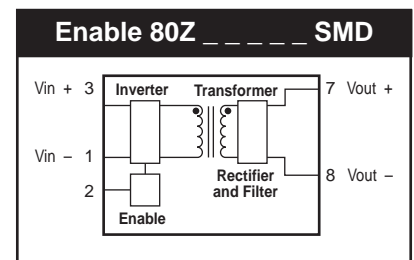
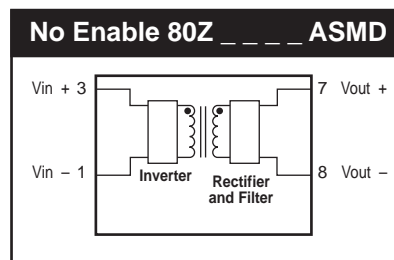


| Electrical Specifications at 25°C | | | | | | | | | |
|-----------------------------------|-----------|-------------------------|-----------------|----------------|------------|------------------|-----------------------|--------------------|----------|
| Part No | Input VDC | Input Voltage Tolerance | Enable Function | Isolation Vrms | Output VDC | Regulated Output | Output Current mA max | Ripple @ 20 MHz BW | |
| | | | | | | | | mVpp max | mVpp Typ |
| 80Z0509 ASMD | 5 | ±5% | No | 500 | -9 | No | 200 | 100 | 50 |
| 80Z1209 ASMD | 12 | ±5% | No | 500 | -9 | No | 200 | 100 | 50 |
| 80Z0509 BSMD | 5 | ±5% | Low TTL | 500 | -9 | No | 200 | 100 | 50 |
| 80Z1209 BSMD | 12 | ±5% | Low* | 500 | -9 | No | 200 | 100 | 50 |
| 80Z0509 CSMD | 5 | ±5% | Hi TTL | 500 | -9 | No | 200 | 100 | 50 |
| 80Z1209 CSMD | 12 | ±5% | Hi TTL | 500 | -9 | No | 200 | 100 | 50 |
| 80Z1209 DSMD | 12 | ±5% | Low TTL | 500 | -9 | No | 200 | 100 | 50 |

* **Enable:** Enable requires open collector.

General Specifications

Power Ratings: Up to 1.8 W
 Switching Frequency: 80 KHz min (110 kHz typ)
 Output Voltage Accuracy: ±5% nominal line at full load
 Minimum Efficiency: >68% nominal line at full load
 MTBF: 1,700 khr typical at 40°C



Note:
 80Z0509 BSMD: pin 2 is Low Enable TTL
 80Z1209 BSMD: pin 2 is Low Enable Open Collector
 80Z ___ CSMD: pin 2 is High Enable TTL
 80Z1209 DSMD: pin 2 is Low Enable TTL

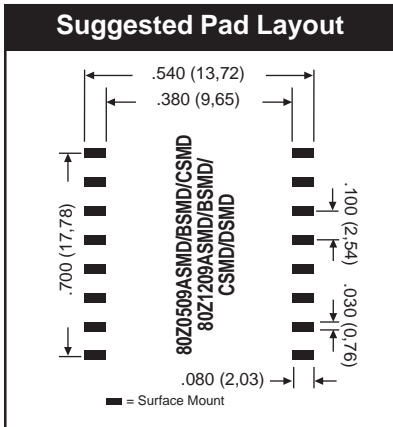


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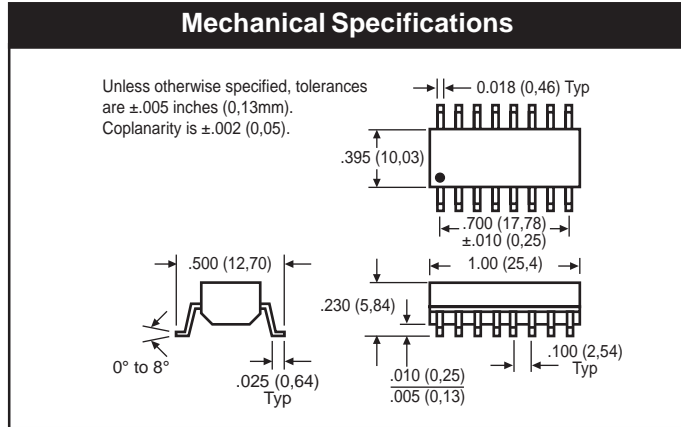


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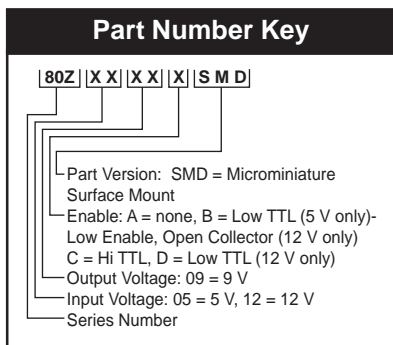
Suggested Pad Layout



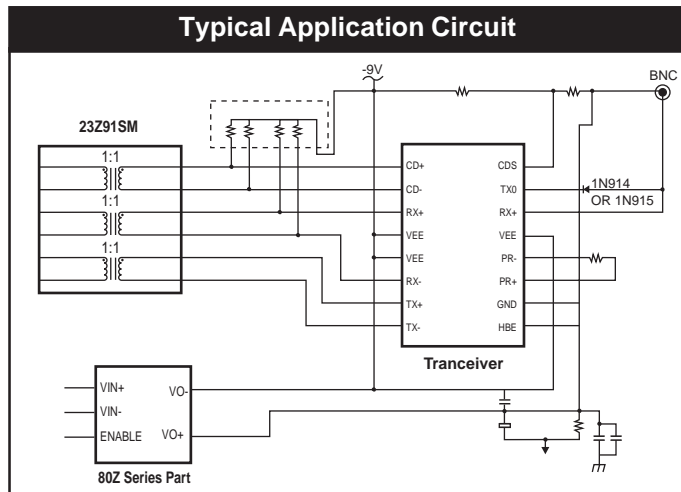
Mechanical Specifications



Part Number Key



Typical Application Circuit



Note:
Please check your IC manufacturer's data book for more detailed information.

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The components on this data sheet are Fil-Mag Legacy Parts.

In the construction of the components described, the full intent of the specification will be met. Pulse, however, reserves the right to make, from time to time, such departures from the detail specifications as may be required to permit improvements in the design of its products.

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