

13DS3 – SERIES

1000 VDC 1WATT SINGLE OUTPUT SURFACE MOUNT DC-DC CONVERTER

FEATURES

- 14 pin SMD package
- 1000VDC isolation
- Unregulated output types.
- UL 94V-0 package material.
- Wind Temperature Performance at full 1 WATT load -40°C to 85°C



GENERAL SPECIFICATIONS

Output ripple(20MHz Band limited)

| | |
|-----------------------|-----------------|
| 5V Output types | : 85mVp-p Max |
| 9V Output types | : 75mVp-p Max |
| 12V Output types | : 65mVp-p Max |
| 15V Output types | : 76mVp-p Max |
| Isolation resistance | : 1000VDC Min |
| Switching frequency | : 110KHz TYP. |
| Operating temperature | : -40°C to 85°C |
| Efficiency | : 70% TYP |

ELECTRICAL SPECIFICATIONS

| | |
|--|----------------------------------|
| Input voltage range | : ±10% |
| Output voltage tolerance | : ±5% |
| Load Regulation | |
| 5V & 9V Output types | : 15% & 9% Max |
| 12V & 15V Output types | : 7.5% & 7% Max |
| Line voltage regulation (10% to 100% full load) | : 1.2%/1% of V _{IN} Max |

| Part Number. | Input Voltage (VDC) | Output Voltage (VDC) | Output Current (mA) | Input Current (mA) | Efficiency (%) | Isolation Capacitance (pF) |
|--------------|---------------------|----------------------|---------------------|--------------------|----------------|----------------------------|
| 13DS3-05S05N | 5 | 5 | 200 | 294 | 68 | 35 |
| 13DS3-05S09N | 5 | 9 | 111 | 267 | 75 | 43 |
| 13DS3-05S12N | 5 | 12 | 83 | 260 | 77 | 42 |
| 13DS3-05S15N | 5 | 15 | 66 | 256 | 78 | 44 |
| 13DS3-12S05N | 12 | 5 | 200 | 124 | 67 | 47 |
| 13DS3-12S09N | 12 | 9 | 111 | 114 | 73 | 77 |
| 13DS3-12S12N | 12 | 12 | 83 | 113 | 74 | 88 |
| 13DS3-12S15N | 12 | 15 | 66 | 111 | 75 | 95 |

PIN CONNECTION

| PIN | SINGLE OUTPUT |
|-----|---------------|
| 1 | -INPUT |
| 3 | +INPUT |
| 7 | -OUTPUT |
| 8 | +OUTPUT |
| 14 | NC |

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MARKING AND DIMENSION

Dimensions: inches/mm unless otherwise specified, all tolerances are $\pm 0.05/\pm 0.13$

