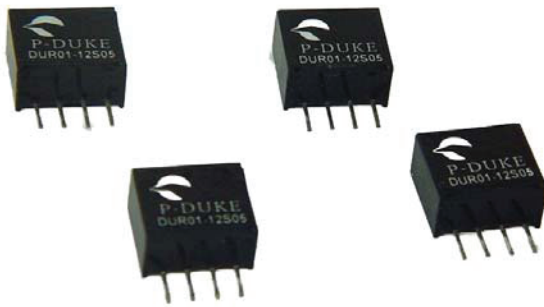


DUR SERIES

DC / DC Single Output: 1 Watt



Features

- 1.0 watt output power, PCB mounting
- Input options: 5V, 12V, 15V & 24vdc
- Industry standard footprint
- 1000V isolation
- Single-in-line (SIP) package
- High efficiency
- High MTBF >1m hrs
- High operating temperature
- Non-Conductive case
- Non Regulated

Specifications:

| | | | |
|---------------------------------|--|------------------------------|---------------------------------------|
| Input Voltage | 3.3VDC (3.0 ~ 3.6) 5VDC (4.5 V~ 5.5) 12VDC (10.8 ~ 13.2) 15VDC (13.5 ~ 16.5) 24VDC (21.6 ~ 26.4) | Isolation Capacitance | 80pF max. |
| Input Filter | Capacitor | Switching Frequency | 90KHz |
| Efficiency | Model dependent 68-80% | Safety | IEC60950, EN60950, UL60950 |
| Output Power | 1 watt | Case Material | Non-conductive black plastic |
| Voltage Accuracy | ±5% (full load and nominal input) | Potting Material | Epoxy UL94-V0 |
| Minimum Load | 10% to meet regulation | Operating Temperature | -40°C to + 85°C (non derating) |
| Line Regulation | 1.3% per 1% Vin (10 ~ 100% load) | Thermal Shock | MIL-STD-810F |
| Load Regulation | 3.3V & 5V output: ±15% (10% to 100% load) Other outputs ±10% (10% to 100% load) | Vibration | 10-55Hz, 10G, 30 min along X, Y and Z |
| Ripple & Noise | See table (20MHz bandwidth) | Humidity | 5% to 95% RH |
| Temperature Coefficient | ±0.1% per °C max | MTBF | 1.137 x 10 ⁹ hrs |
| Short circuit Protection | Short Term | Dimensions | 11.5 x 6.0 x 10.2mm |
| Isolation Voltage | Input – Output: 1000VDC | Weight | 1.5g |

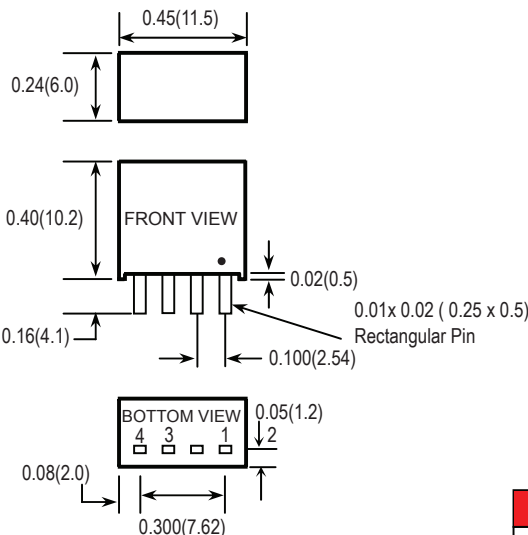
DUR SERIES

DC / DC Single Output: 1 Watt

| Model | Input V | Output V | Output Current | | Output Ripple & Noise | Input Current | | Eff (%) | Capacitor Load max |
|-------------|---------------|----------|----------------|-----------|-----------------------|---------------|-----------|---------|--------------------|
| | | | Min. load | Full load | | No load | Full load | | |
| DUR01-33S33 | 3.0 – 3.6 V | 3.3 V | 30.3mA | 303mA | 100mVp-p | 42mA | 473mA | 68 | 6.2uF |
| DUR01-33S05 | 3.0 – 3.6 V | 5 V | 20mA | 200mA | 100mVp-p | 38mA | 451mA | 70 | 6.2uF |
| DUR01-33S12 | 3.0 – 3.6 V | 12 V | 8.4mA | 84mA | 100mVp-p | 45mA | 449mA | 72 | 6.2uF |
| DUR01-33S15 | 3.0 – 3.6 V | 15 V | 6.6mA | 66mA | 100mVp-p | 45mA | 423mA | 75 | 6.2uF |
| DUR01-05S33 | 4.5 – 5.5 V | 3.3 V | 30.3mA | 303mA | 100mVp-p | 25mA | 312mA | 68 | 6.2uF |
| DUR01-05S05 | 4.5 – 5.5 V | 5 V | 20mA | 200mA | 100mVp-p | 25mA | 303mA | 70 | 6.2uF |
| DUR01-05S12 | 4.5 – 5.5 V | 12 V | 8.4mA | 84mA | 100mVp-p | 25mA | 272mA | 78 | 6.2uF |
| DUR01-05S15 | 4.5 – 5.5 V | 15 V | 6.6mA | 66mA | 100mVp-p | 24mA | 262mA | 80 | 6.2uF |
| DUR01-12S33 | 10.8 – 13.2 V | 3.3 V | 30.3mA | 303mA | 100mVp-p | 14mA | 131mA | 68 | 6.2uF |
| DUR01-12S05 | 10.8 – 13.2 V | 5 V | 20mA | 200mA | 100mVp-p | 10mA | 126mA | 70 | 6.2uF |
| DUR01-12S12 | 10.8 – 13.2 V | 12 V | 8.4mA | 84mA | 100mVp-p | 14mA | 113mA | 78 | 6.2uF |
| DUR01-12S15 | 10.8 – 13.2 V | 15 V | 6.6mA | 66mA | 100mVp-p | 13mA | 109mA | 80 | 6.2uF |
| DUR01-15S33 | 13.5 – 16.5 V | 3.3 V | 30.3mA | 303mA | 100mVp-p | 9mA | 105mA | 68 | 6.2uF |
| DUR01-15S05 | 13.5 – 16.5 V | 5 V | 20mA | 200mA | 100mVp-p | 9mA | 101mA | 70 | 6.2uF |
| DUR01-15S12 | 13.5 – 16.5 V | 12 V | 8.4mA | 84mA | 100mVp-p | 8mA | 91mA | 78 | 6.2uF |
| DUR01-15S15 | 13.5 – 16.5 V | 15 V | 6.6mA | 66mA | 100mVp-p | 9mA | 87mA | 80 | 6.2uF |
| DUR01-24S33 | 21.6 – 26.4 V | 3.3 V | 30.3mA | 303mA | 100mVp-p | 6mA | 64mA | 70 | 6.2uF |
| DUR01-24S05 | 21.6 – 26.4 V | 5 V | 20mA | 200mA | 100mVp-p | 6mA | 63mA | 70 | 6.2uF |
| DUR01-24S12 | 21.6 – 26.4 V | 12 V | 8.4mA | 84mA | 100mVp-p | 5mA | 57mA | 78 | 6.2uF |
| DUR01-24S15 | 21.6 – 26.4 V | 15 V | 6.6mA | 66mA | 100mVp-p | 6mA | 54mA | 80 | 6.2uF |

Notes

1. MTBF as per BELLCORE TR-NWT-000332. Case 1: 50% Stress, Temperature at 40°C. (Ground fixed and controlled environment)
2. Typical values at nominal input voltage and full resistive load.
3. The output requires a minimum loading on the output to maintain specified regulation. Operation under no-load condition will not damage these devices, however they may not meet all listed specification.



1. All dimensions in Inches (mm)
Tolerance: X.XX±0.02 (X.X±0.5)
X.XXX±0.01 (X.XX±0.25)
2. Pin pitch tolerance ±0.01(0.25)
3. Pin dimension tolerance ±0.004 (0.1)

| Pin Assignment | |
|----------------|----------|
| PIN | SINGLE |
| 1 | - INPUT |
| 2 | + INPUT |
| 3 | - OUTPUT |
| 4 | + OUTPUT |

