

100 WATT AC-DC CONVERTER VTD-SZ SERIES

| Specifications<AC/DC> | Model | | | | |
|---|---|---------|---------|---------|---------|
| | VTD05SZ | VTD12SZ | VTD15SZ | VTD24SZ | VTD48SZ |
| VTD**SZ 100WATTS/SINGLE OUTPUT | | | | | |
| Input Characteristic | | | | | |
| Input Voltage | AC100V/200V | | | | |
| Input Range | AC85-132V/170-264V | | | | |
| Input Frequency | 50/60Hz | | | | |
| Input Frequency Range | 47 -440Hz | | | | |
| Phase | Single | | | | |
| Inrush Current *1 | 20A(maximum) at rated input/output | | | | |
| Efficiency [%] (typical) *2 | 80 | 83 | 84 | 85 | 87 |
| Output Characteristic | | | | | |
| Output Voltage [V] | 5 | 12 | 15 | 24 | 48 |
| Output Current [A] | 20.0 | 9.0 | 7.0 | 5.0 | 2.2 |
| Voltage Adjust Range | +/-10% of Rated Output Voltage(at no load within input range) | | | | |
| Ripple and Noise [mVp-p](maximum) *3 | 100 | 170 | 200 | 290 | 530 |
| Regulation | | | | | |
| a.Statistic Line Regulation [mV](maximum) | 40 | 96 | 120 | 192 | 384 |
| b.Statistic Load Regulation [mV](maximum) | 45 | 108 | 135 | 216 | 432 |
| c.Temperature Coefficient *4 | 0.03%/°C | | | | |
| d.Drift[mV](maximum) *5 | 40 | 75 | 90 | 135 | 255 |
| e.Dynamic Load Regulation [mV](typical) *6 | 150 | 360 | 450 | 720 | 1440 |
| f.Recovery Time *6 | 0.5mS(typical) | | | | |
| Rise up time | 300mS(maximum) at 25°C and rated input/output | | | | |
| Hold up time | 20mS(typical) at 25°C and rated input/output | | | | |
| Functions | | | | | |
| Overcurrent Protection | Current Limiting with automatic recovery | | | | |
| Overvoltage Protection | output shutdown | | | | |
| Remote Sense | not available | | | | |
| Remote On/Off | available | | | | |
| Environmental | | | | | |
| Operating Temperature | 0 to +50°C | | | | |
| Operating Humidity | 85%RH(non-condensing) | | | | |
| Storage Temperature | -20 to +85°C | | | | |
| Storage Humidity | 30 to 85%RH(non-condensing) | | | | |
| Withstanding Voltage | Primary-Secondary AC2,500Vfor 1minute | | | | |
| | Primary-Frame Ground AC2,500V for 1minute | | | | |
| | Secondary-Frame Ground AC500V for 1minute | | | | |
| Isolation Resistance | Primary-Secondary-Frame Ground 50MΩ(minimum) by DC500V insulation tester | | | | |
| Vibration | 5-10Hz:10mm double amplitude,10-55Hz:19.6m/s ² ,20minutes' period for 60minutes each along X,Y,Z axes(non-operating) | | | | |
| Shock | 294m/s ² | | | | |
| Cooling | Convection | | | | |
| ? Leakage Current | 1.0mA(maximum) | | | | |
| ? Line Conduction Noise | Not specified | | | | |
| ? Safety | - | | | | |
| ? Weight (typical) | 750g | | | | |
| ? MTBF [H] | 600,000 | | | | |
| ? Switching Frequency[kHz](typical) | 63 | | | | |

Conditions:

*1 at cold start

*2 at DC260V and rated output

*3 measured by a bayonet probe at the output connector at a 0 to 100MHz bandwidth

*4 at 0 to +50°C

*5 for 7hour period after 1hour warm-up at 25°C and rated input/output

*6 when output current changed from 25% to 75% of rated output current rapidly at rated input