

50 Watts Quarter Brick Type 8:1 Input Voltage Range Isolated DC - DC Converters

FEATURES

- ◆ Fully Protected (OTP/OCV/OVP/UVLO) /5000m Operating Altitude
- ◆ 3000Vac I/O Isolation / Regulated Outputs / Low No Load Consumption
- ◆ Fixed 200KHz Switching Frequency / Remote On/Off
- ◆ Shock & Vibration EN50155 (EN61373) Compliant
- ◆ Fire & Smoke EN45545-2 Compliant
- ◆ EN50155 Compliant With External Circuit
- ◆ -55°C Operating Available (Suffix "L")

SPECIFICATIONS

Input Voltage Range 36V(Range 9-75V)
Undervoltage lockout Turn-on: 8.4~9.0VDC
Turn-off: 7.6~8.2VDC
Lockout Hysteresis: 0.8VDC

Remote On/Off Logic See note
Input Filter.....Pi Type
Voltage Accuracy..... $\pm 1\%$ max
External Load CapacitanceSee Model Number Table
Output Voltage Trim/Remote Sense Range -20~+15%, +15%
R & N(5~20MHz BW) 12,15V 150mVpK-pK max, 80mV/RMS
24,28V 240mVpK-pK max, 120mV/RMS
48V 480mVpK-pK max, 220mV/RMS

Temperature Coefficient $\pm 0.02\%/^{\circ}\text{C}$ max
Short Circuit Protection Continuous, Auto Recovery
Line Regulation (High line to Low line)..... $\pm 0.2\%$ max
Load Regulation (Full load to No Load)..... $\pm 0.2\%$ max
Over Voltage Protection 117~140%
OCP(Hiccup mode, Auto Recovery)110%~210%
Isolation Voltage Input to Output.....3000Vac
Input to Case(Base Plate).....2100Vac
Output to Case(Base Plate).....1500Vac

Isolation Resistance.....100M Ω min
Operating Case Temperature.....-40°C To+105°C
Storage Temperature Range.....-55°C To +125°C
Over Temperature Shutdown, Recovery110°C , 100°C
Case Material.....Aluminum Baseplate w/plastic Case



Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (A)	No Load Input Current	EFF. Typ. %	Capacitor Load Max.
DWQB050-X2xyz	9-75	12	4.17	8mA	91	8000 μF
DWQB050-X3xyz	9-75	15	3.33	8mA	90	6800 μF
DWQB050-X9xyz	9-75	24	2.08	10mA	90	2350 μF
DWQB050-X9Cxyz	9-75	28	1.79	10mA	90	2350 μF
DWQB050-X9Bxyz	9-75	48	1.05	10mA	91	700 μF

Note :

1. Nominal Input Voltage 36 VDC
2. An External Input Capacitor 220uF for All Models are Recommended to Reduce Input Ripple Voltage
3. All Specifications are Typical at Nominal Input, Full Load at 25°C Unless Otherwise Noted.
4. Ripple and Noise measure at Full Load, 22uF Aluminum Solid Capacitor and 1uF Ceramic Capacitors.
5. Remote ON/OFF Logic Compatibility.....Open collector Refer To -V Pin
Suffix x = blank stands for Positive Remote Logic.
Logic Low (Module OFF)..... 0 to < 1.0V
Logic High (Module ON)..... 4.0 to < 75V
Suffix x = N, Negative Remote Logic.
Logic Low (Module OFF)..... 4.0 to < 75V
Logic High (Module ON)..... 0 to < 1.0V
Suffix y = blank stands for M3x0.5 mounting inserts
Suffix y = C stands for Clear mounting insert (3.2mm DIA)
Suffix z = blank stands for -40~105°C operating temp.
Suffix z = L stands for -55~105°C operating temp.

MECHANICAL DRAWING (Unit: inch(mm))

