

75 Watts Quarter Brick Type 2:1 High Input Voltage Isolated DC - DC Converters

FEATURES

- ◆ Fully Protected (OTP/OCP/OVP/UVLO)
- ◆ 3000VAC I/O Isolation / Regulated Outputs
- ◆ Fixed 300KHz Switching Frequency
- ◆ Shock & Vibration MIL-STD-810F Compliant
- ◆ Fire & Smoke EN45545 Compliant
- ◆ 3000m Operating Altitude
- ◆ -55°C Operating Available (Suffix "L")

SPECIFICATIONS

Input Voltage Range.....300V(Range 180-450V)
Undervoltage lockout

power up: 165~175VDC / power down: 155~165VDC

Remote On/Off Logic See note

Input Filter.....Pi Type

Voltage Accuracy.....±1% max

External Load CapacitanceSee Model Number Table

External Trim Adj. Range.....±10%

R & N(5~20MHz 8W)..... 3.3 & 5V.....100mVpK-pK max

12 & 15V.....150mVpK-pK max

24 & 48V.....240mVpK-pK max

Temperature Coefficient.....± 0.02%/°C max

Short Circuit Protection.....Continuous, Auto Recovery

Line Regulation (note 1).....± 0.2% max

Load Regulation (note 2).....± 0.2% max

OVP112~130% for 3.3 & 5V ;122~130% for others

OCP(Hiccup mode, Auto Recovery)110%~160%

Isolation Voltage Input to Output.....3000Vac(4200Vdc)

Input to Case(Base Plate).....2500Vac(3500Vdc)

Output to Case(Base Plate).....500Vac(700Vdc)

Isolation Resistance.....100M Ω min

Operating Case Temperature.....-40°C To +105°C

Storage Temperature Range.....-55°C To +125°C

Thermal Shutdown, Recovery Temp.....110°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.
DHQB075-C0xyz	180-450	3.3	15.0	10mA	81.5	15000μF
DHQB075-C1xyz	180-450	5	15.0	10mA	83.5	15000μF
DHQB075-C2xyz	180-450	12	6.25	10mA	88.0	6250μF
DHQB075-C3xyz	180-450	15	5.0	10mA	90.0	5000μF
DHQB075-C9xyz	180-450	24	3.12	10mA	90.0	3300μF
DHQB075-C9Bxyz	180-450	48	1.56	10mA	89.0	1000μF

Note

1. Measured at Nominal Input Voltage 300 VDC
2. An External Input Capacitor 33uF for All Models are Recommended to Reduce Input Ripple Voltage
3. Output Ripple and Noise Measured With an External MLCC 1000pF Connected Between -Vin to Case, and 10uF Aluminum and 1uF Ceramic Capacitor Across Output for 48Vout, and With 10uF Tantalum and 1uF Ceramic Capacitor for Others.
4. Remote ON/OFF Logic Compatibility.....Open collector Ref. To -V Pin
Suffix x = blank stands for Positive Remote Logic.
Logic Low (Module OFF).....< 1.2V
Logic High (Module ON)..... Open circuit 3.5~75V
Suffix x = N, Negative Remote Logic.
Logic High (Module OFF)..... Open circuit 3.5~75V
Logic Low (Module ON).....< 1.2V
Suffix y = blank stands for M3x0.5 mounting inserts
Suffix y = C stands for Clear mounting insert (3.2mm DIA)
Suffix y = F stands for Flanged Baseplate with M3 mounting insert
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))

