

# e D H Q B 0 7 5

S E R I E S



## 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

### 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 Capacitance.....See Model Number Table  
 External Trim Adj. Range.....±10%  
 R & N(5~20MHz BW).....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.  
 OVP.....112~130% 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.
eDHQB075-C0	180-450	3.3	15.0	10mA	81.5	15000µF
eDHQB075-C1	180-450	5	15.0	10mA	83.5	15000µF
eDHQB075-C2	180-450	12	6.25	10mA	88.0	6250µF
eDHQB075-C3	180-450	15	5.0	10mA	90.0	5000µF
eDHQB075-C9	180-450	24	3.12	10mA	90.0	3300µF
eDHQB075-C9B	180-450	48	1.56	10mA	89.0	1000µF
eDHQB075-C0N	180-450	3.3	15.0	10mA	81.5	15000µF
eDHQB075-C1N	180-450	5	15.0	10mA	83.5	15000µF
eDHQB075-C2N	180-450	12	6.25	10mA	88.0	6250µF
eDHQB075-C3N	180-450	15	5.0	10mA	90.0	5000µF
eDHQB075-C9N	180-450	24	3.12	10mA	90.0	3300µF
eDHQB075-C9BN	180-450	48	1.56	10mA	89.0	1000µF

Note

1. Measured at Nominal Input Voltage 300 VDC
2. An External Input Capacitor 330µF 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 10µF Aluminum and 1µF Ceramic Capacitor Across Output for 48Vout, and With 10µF Tantalum and 1µF Ceramic Capacitor for Others.
4. Remote ON/OFF Logic Compatibility.....Open collector Ref. To -V Pin  
 Suffix = Blank, Positive Remote Logic.  
 Logic Low (Module OFF).....< 1.2V  
 Logic High (Module ON)..... Open circuit 3.5~75V  
 Suffix = N, Negative Remote Logic.  
 Logic High (Module OFF)..... Open circuit 3.5~75V  
 Logic Low (Module ON).....< 1.2V

### MECHANICAL DRAWING (Unit: inch(mm))

