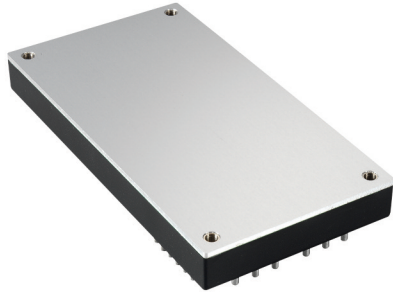


QSB Series



- Up to 92% Efficiency
- Industry Standard Full Brick Package
- -40 °C to +100 °C Operating Temperature
- High Power Density
- Baseplate-cooled
- Remote On/Off & Remote Sense
- 3 Year Warranty

Specification

Input

Input Voltage Range	• 24 V (18-36V), 48 V (36-75V)
Input Current	• See table
Idle Current	• 50 mA
Input Reverse Voltage Protection	• None
Input Filter	• Pi network
Undervoltage Lockout	• 24 Vin: turn on 17.0V, turn off 16.0V 48 Vin: turn on 35.0V, turn off 33.0V

Output

Output Voltage Trim	• 60% to 110% of nominal output, see application notes
Initial Set Accuracy	• $\pm 1.5\%$ max
Line Regulation	• $\pm 0.2\%$ max measured from high line to low line
Load Regulation	• $\pm 0.5\%$ max measured from 0-100% load
Transient Response	• 5% max deviation, recovery to within 1% in 500 μ s, 25% step load change
Ripple & Noise	• 12 V models: 120 mV pk-pk 28 V models: 280 mV max pk-pk 32 V models: 320 mV max pk-pk 48 V models: 480 mV max pk-pk 20 MHz bandwidth (see note 1)
Overvoltage Protection	• 115-140%
Short Circuit Protection	• Continuous
Current Limit	• 110-150% nominal output
Thermal Shutdown	• Case temperature > 110 °C typical
Temperature Coefficient	• $\pm 0.03\%/^{\circ}\text{C}$
Remote On/Off	• Isolated input, can be controlled via primary or secondary side. Module on 1-10 mA. Internal 1K Ω resistor fitted, Module off < 1 mA or open circuit
Remote Sense	• Compensates up to 10% of Vout nominal, total of output trim and remote sense
Current Share	• Parallel up to 4 modules using the PC pin

General

Efficiency	• See tables
Isolation Voltage	• 1500 VDC Input to Output 1500 VDC Input to Case 1500 VDC Output to Case
Isolation Resistance	• 10 Ω
Isolation Capacitance	• 4000 pF typical
Switching Frequency	• 48 Vin: 12 V, 28 V, 32 V: 300 kHz typical Others: 250 kHz
DC OK Signal	• DC OK TTL low, not OK TTL high, connect IOC pin to Aux pin through a resistor (see note 3)
Power Density	• 108.7 W/in 3
MTBF	• 381 kHrs typical to MIL-HDBK-217F at 25 °C, GB

Environmental

Operating Base Plate Temperature	• -40 °C to +100 °C, see derating curve
Storage Temperature	• -55 °C to +105 °C
Operating Humidity	• Up to 90% non-condensing
Cooling	• Baseplate-cooled, see derating curve

EMC & Safety

Emissions	• EN55022, level A conducted, with external components. Contact sales for details.
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