J SERIES

Dual output

Recommended for new design-ins

- **1.0 x 2.0 x 0.375 inch package**
- **75% typical efficiency**
- **Power densities to 6W/in³**
- **Six sided metal case**
- **20kHz switching frequency**

This series of DC/DC converters features a high power density solution for those applications where space is at a premium and tight regulation is not critical. With dimensions of only 1.0 x 2.0 x 0.380 inches, these DC/DC converters are designed for high component density circuit boards in card cages with 0.5 inch spacing. They are available as dual output models with output voltages of ±15VDC and ±18VDC. Efficiencies as high as 80% are attained by offering unregulated outputs. All models have short term short circuit protection with automatic restart upon removal of short circuit. The J series is housed in a six sided metal case. Isolation voltage is 500VDC minimum and derating is not required over the operating temperature range. All models are free air convection cooled.

[2 YEAR WARRANTY]

SPECIFICATION

All specifications are typical at nominal input, full load at 25°C unless otherwise stated

OUTPUT SPECIFICATIONS		
Line regulation		±1.0%
Load regulation	FL to 25% FL	±6.0%
Ripple and noise	20MHz bandwidth	100mV pk-pk, typ.,
Temperature coefficient		±0.2%/°C, max.
Short circuit protection	Output to common	10s, max.
INPUT SPECIFICATIONS		
Input voltage range	5VDC 12VDC	4.65V to 5.25VDC 10.8V to 13.2VDC
Input filter		LC filter
Input overvoltage		See table on facing page
Input filter		Capacitor

GENERAL SPECIFICATIONS		
Efficiency		See table
Isolation voltage		500VDC, min.
Isolation resistance		$10^9\Omega$ min.
Switching frequency	Fixed	20kHz
EMI/RFI		Six sided continuous metal case
Case material		Black coated copper with non-conductive base
Weight		31g (1.0oz)
ENVIRONMENTAL SPECIFICATIONS		
Thermal performance	Operating Non-operating Derating	-25°C to +71°C –55°C to +85°C None

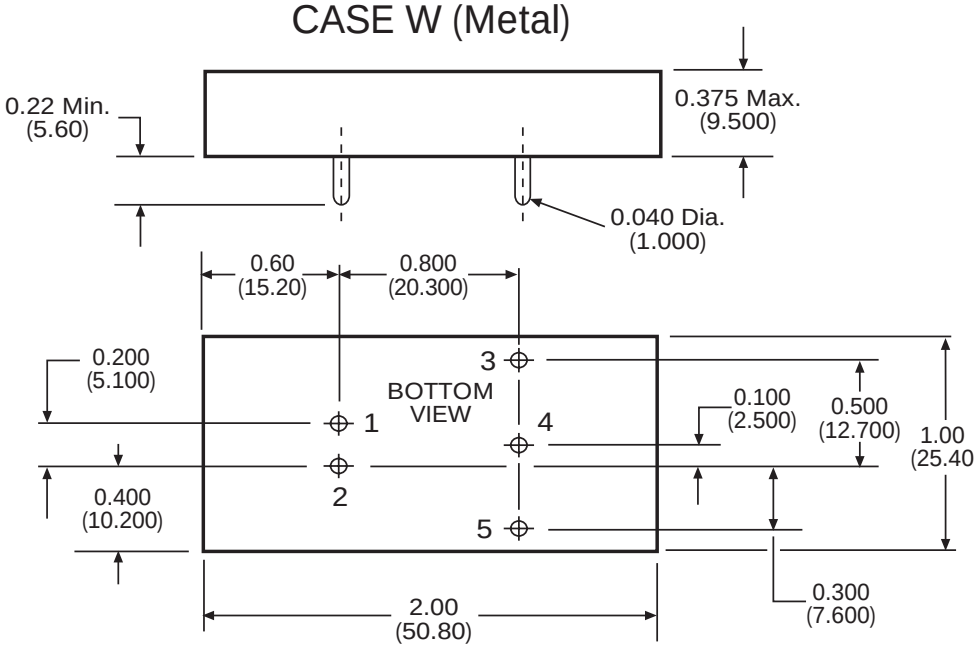
5 to 6 Watt
Nominal input DC/DC converters

INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	INPUT CURRENT		TYPICAL EFFICIENCY	MODEL NUMBER
			NO LOAD	FULL LOAD (1)		
5VDC	15VDC	200mA	200mA	1600mA	75%	J05D15/200W
5VDC	18VDC	165mA	180mA	1500mA	79%	J05D18/165W

Notes
1 Maximum.
2 Measured from full load to 25% load.

PIN CONNECTIONS	
PIN NUMBER	FUNCTION
1	+ Input
2	– Input
3	+ Output
4	Common
5	– Output

CASE W (Metal)



ALL DIMENSIONS IN INCHES (mm)

Tolerance .xx = ±0.04
.xxx = ±0.005