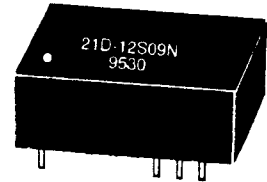


## 20D/21D SERIES 1.8 WATT 14 & 16 PIN DIL DC/DC CONVERTERS

**FEATURES**

- Up to 1.8 watt output power
- 14 & 16 pin DIL package
- 500 VDC isolation
- Unregulated and regulated output types



**GENERAL SPECIFICATIONS**

- Output ripple & noise — 50mVp-p(20KHz B.W.)
- Isolation resistance — 100MΩ min @ 500VDC
- Switching frequency — 20KHz min
- Operating temperature — 0°C to 70°C
- Short circuit protection — short term

**ELECTRICAL SPECIFICATIONS**

- Input voltage range — ± 10%
- Output voltage tolerance — ± 5%
- Line regulation — unregulated: ± 1.2%  
— regulated: ± 0.3%
- Load regulation — unregulated: ±10%  
— (regulated): ± 0.5%

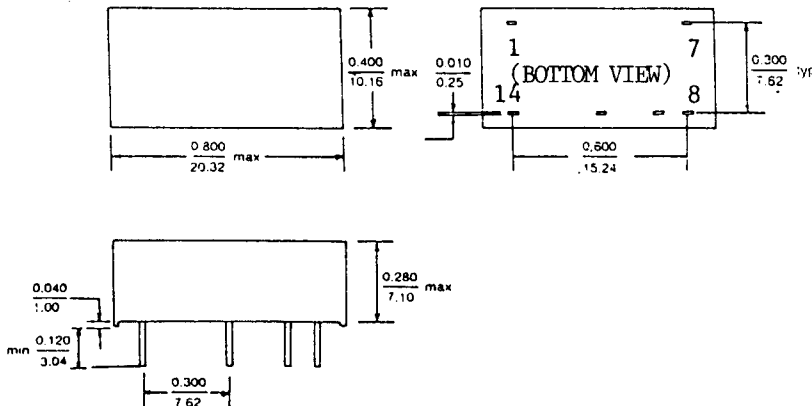
Ordering Code:    20D = 14 pin DIL package (Option 1)  
                      21D = 16 pin DIL package (Option 2)

(typical at nominal input, rated load and 25° unless otherwise specified.)

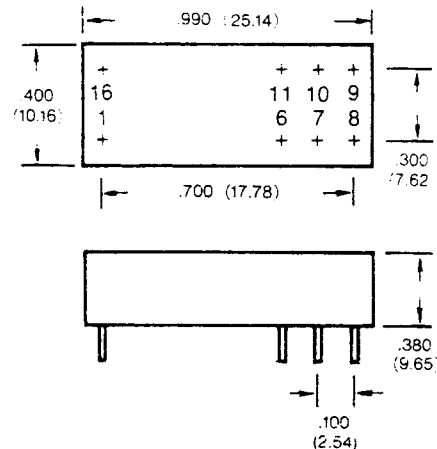
Part Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency (%Typ.)
2XD-05S05R	5	5	360	50
2XD-05S09N	5	9	200	75
2XD-05S12R	5	12	150	55
2XD-05S15N	5	15	120	75
2XD-12S05N	12	5	360	75
2XD-12S09R	12	9	200	55
2XD-12S12N	12	12	150	75
2XD-12S15R	12	15	120	55
2XD-24S05N	24	5	360	75
2XD-24S12R	24	12	150	55
2XD-24S15N	24	15	120	75

S: Single Output D: Dual Output R: Regulated N: Unregulated  
\* Other outputs available: Contact CET for details.

**20D 14 Pin DIL Package**



**21D 16 Pin DIL Package**

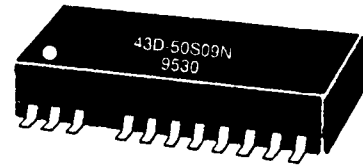
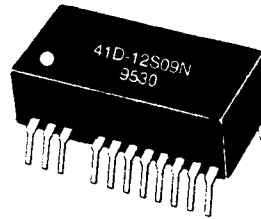


## 41D/43D SERIES

### 1.8 WATT 24 PIN SURFACE MOUNT/THROUGH HOLE DC/DC CONVERTERS

#### FEATURES

- Up to 1.8 watt output power
- 24 pin DIP/surface mount package
- 500 VRMS/2000VRMS isolation available
- Unregulated and regulated output types



#### GENERAL SPECIFICATIONS

- Output ripple & noise — 50mVp-p(20KHz B.W.)
- Isolation resistance — 100MΩ min @ 500VDC
- Switching frequency — 20KHz min
- Operating temperature — 0°C to 70°C
- Short circuit protection — continuous

#### ELECTRICAL SPECIFICATIONS

- Input voltage range — ± 10%
- Output voltage tolerance — ± 5%
- Line regulation (unregulated) — ± 1.2% (regulated) — ± 0.3%
- Load regulation (unregulated) — ±10% (regulated) — ± 0.5%

**Note:** 2000Vrms available on through hole package

Ordering Code: 41D = 24 pin DIP package— (example: 41D-05S05R)  
 43D = 24 pin surface mount package

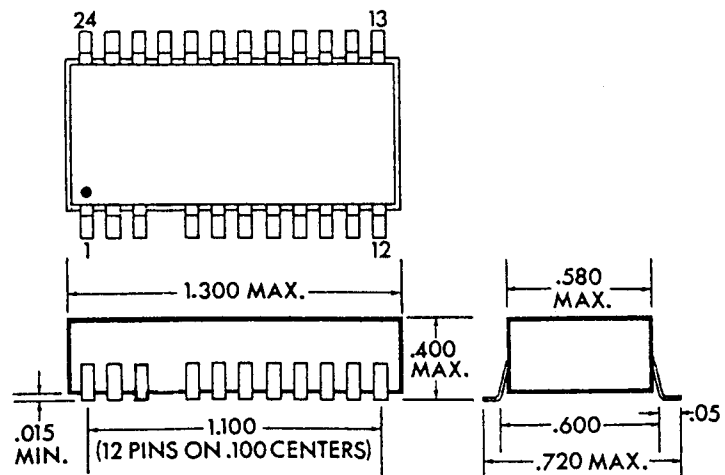
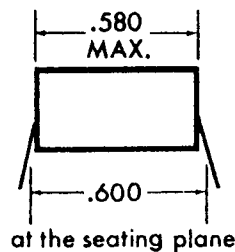
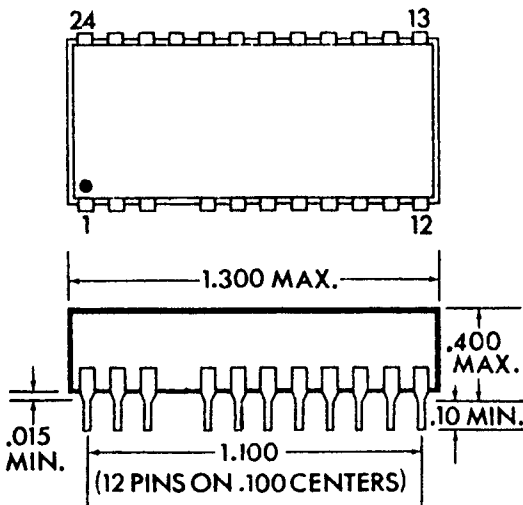
(typical at nominal input, rated load and 25°C unless otherwise specified.)

Part Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency (%Typ.)
4XD-05S05R	5	5	360	50
4XD-05S09N	5	9	200	75
4XD-05S12R	5	12	150	55
4XD-05S15N	5	15	120	75
4XD-05D05N	5	± 5	± 180	75
4XD-05D12R	5	± 12	± 75	55
4XD-05D15N	5	± 15	± 60	75
4XD-12S05R	12	5	360	50
4XD-12S12N	12	12	150	75
4XD-12D12N	12	± 12	± 75	75
4XD-12D15R	12	± 15	± 60	55

S: Single Output D: Dual Output R: Regulated N: Unregulated X: Replace with 1 or 3 to designate case

41D

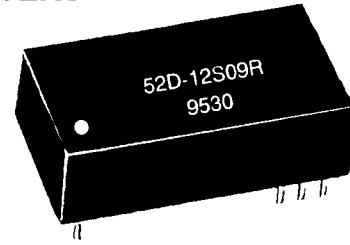
43D



1.8 WATT 24 PIN DIL DC/DC CONVERTERS

FEATURES

- Up to 1.8 watts output power
- 24 pin DIL package
- 500 VDC isolation
- Unregulated and regulated output types



GENERAL SPECIFICATIONS

- Output ripple & noise — 50mVp-p(20KHz B.W.)
- Isolation resistance — 100MΩ min @ 500VDC
- Switching frequency — 20KHz min
- Operating temperature — 0°C to 70°C
- Efficiency (unregulated) — 70% typ. (regulated) — 50% typ.
- Short circuit protection — continuous

ELECTRICAL SPECIFICATIONS

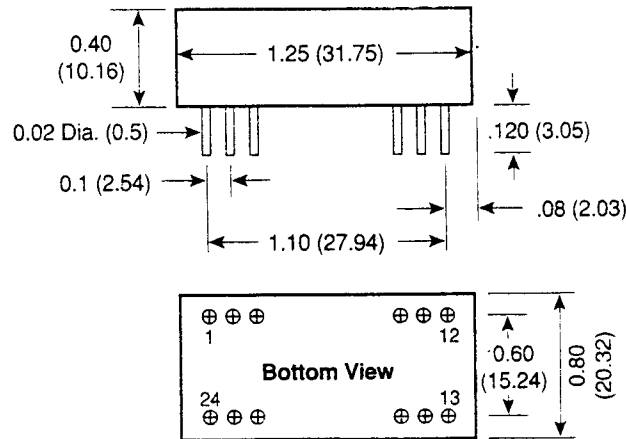
- Input voltage range — ± 10%
- Output voltage tolerance — ± 5%
- Line regulation — unregulated: ± 1.2% — regulated: ± 0.3%
- Load regulation (unregulated) — ±10% (regulated) — ± 0.5%

(typical at nominal input, rated load and 25°C unless otherwise specified.)

Part Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency (%Typ.)
52D-05S05R	5	5	360	50
52D-05S09N	5	9	200	75
52D-05S12R	5	12	150	55
52D-05S15N	5	15	120	75
52D-05D05N	5	± 5	± 180	75
52D-05D12R	5	± 12	± 75	55
52D-05D15N	5	± 15	± 60	75
52D-12S05R	12	5	360	50
52D-12S12N	12	12	150	75
52D-12D12N	12	± 12	± 75	75
52D-12D15R	12	± 15	± 60	55

S: Single Output D: Dual Output R: Regulated N: Unregulated

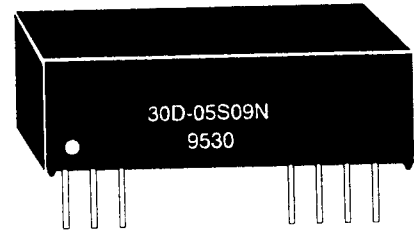
MARKINGS AND DIMENSIONS



## 30D SERIES 1.8 WATT 12 PIN SIP DC/DC CONVERTERS

### FEATURES

- Up to 1.8 watts output power
- 12 pin SIP package
- 500 VDC isolation
- Unregulated and regulated output types



### GENERAL SPECIFICATIONS

- Output ripple & noise — 50mVp-p(20KHz B.W.)
- Isolation resistance — 100MΩ min @ 500VDC
- Switching frequency — 20KHz min
- Operating temperature — 0°C to 70°C
- Efficiency (unregulated) — 70% typ.  
(regulated) — 50% typ.
- Short circuit protection — continuous

### ELECTRICAL SPECIFICATIONS

- Input voltage range — ± 10%
- Output voltage tolerance — ± 5%
- Line regulation — unregulated: ± 1.2%  
— regulated: ± 0.3%
- Load regulation — unregulated: ±10%  
— (regulated): ± 0.5%

(typical at nominal input, rated load and 25°C unless otherwise specified.)

Part Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency (%Typ.)
30D-05S05R	5	5	360	50
30D-05S09N	5	9	200	75
30D-05S12R	5	12	150	55
30D-05S15N	5	15	120	75
30D-05D05N	5	± 5	± 180	75
30D-05D12R	5	± 12	± 75	55
30D-05D15N	5	± 15	± 60	75
30D-12S05R	12	5	360	50
30D-12S12N	12	12	150	75
30D-12D12N	12	± 12	± 75	75
30D-12D15R	12	± 15	± 60	55

S: Single Output D: Dual Output R: Regulated N: Unregulated

### MARKINGS AND DIMENSIONS

