

**MMI**

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**DC/DC CONVERTER  
1.8W**

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### FEATURES

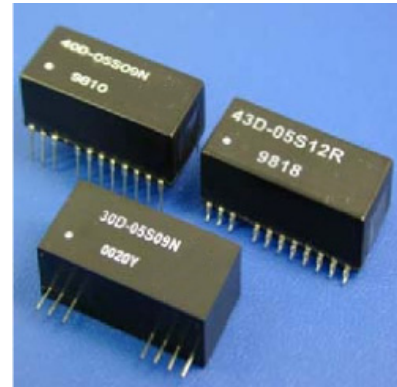
- UP TO 1.8 WATTS OUTPUT POWER
- 12PIN SIP, 24PIN DIP/DIL/SMD PACKAGE
- 500VDC ISOLATION
- UNREGULATED & REGULATED OUTPUT TYPES
- LOW RIPPLE AND NOISE

### GENERAL SPECIFICATIONS

- OUTPUT RIPPLE & NOISE : 50mVp-p(20MHz B.W.)
- ISOLATION RESISTANCE : 100MΩ MIN @500VDC
- SWITCHING FREQUENCY : 20KHz TYP.
- OPERATING TEMPERATURE : 0 °C TO 70°C
- STORAGE TEMPERATURE RANGE : -40°C TO 100°C
- EFFICIENCY(UNREGULATED) : 70% TYP
- (REGULATED) : 50% TYP
- SHORT CIRCUIT PROTECTION : CONTINUOUS

### ELECTRICAL SPECIFICATIONS

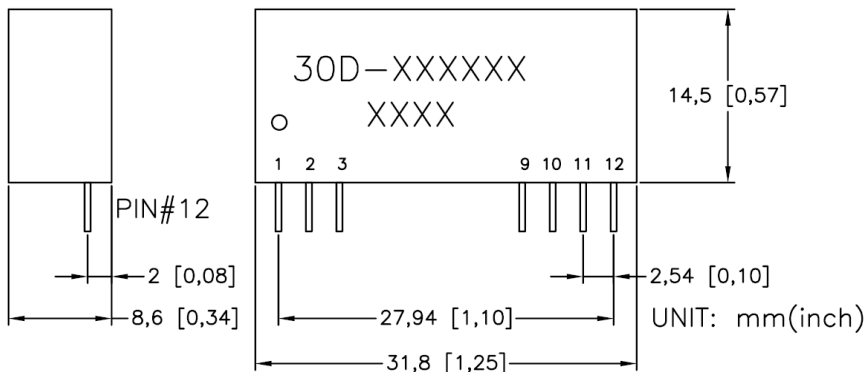
- INPUT VOLTAGE RANGE : ±10%
- OUTPUT VOLTAGE TOLERANCE : ±5%
- LINE REGULATION (REGULATED) : ±0.3%
- UNREGULATED (PER 1% CHAGE IN INPUT VOLTAGE) : ±1.2%
- LOAD REGULATION (REGULATED) : ±0.5%
- UNREGULATED (FOR LOAD CHANGE FROM 100% TO 20%) : ±10%



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

PART NO.	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	EFFICIENCY(%TYP)
30D-05S05R	5VDC	5VDC	360mA	50
30D-05S09N	5VDC	9VDC	200mA	75
30D-05S12R	5VDC	12VDC	150mA	55
40D-05S15N	5VDC	15VDC	120mA	75
40D-05S12R	5VDC	12VDC	150mA	55
40D-05D15N	5VDC	±15VDC	±60mA	75
43D-12S05R	12VDC	5VDC	360mA	50
43D-12S12N	12VDC	12VDC	150mA	75
50D-12S15R	12VDC	15VDC	120mA	55
50D-12D12N	12VDC	±12VDC	±75mA	75
50D-12D15R	12VDC	±15VDC	±60mA	55
50D-24S05N	24VDC	5VDC	360mA	70
52D-24S12R	24VDC	12VDC	150mA	55
52D-24S15N	24VDC	15VDC	120mA	75
52D-24D12R	24VDC	±12VDC	±75mA	55
52D-24D15N	24VDC	±15VDC	±60mA	75

### MARKINGS AND DIMENSIONS



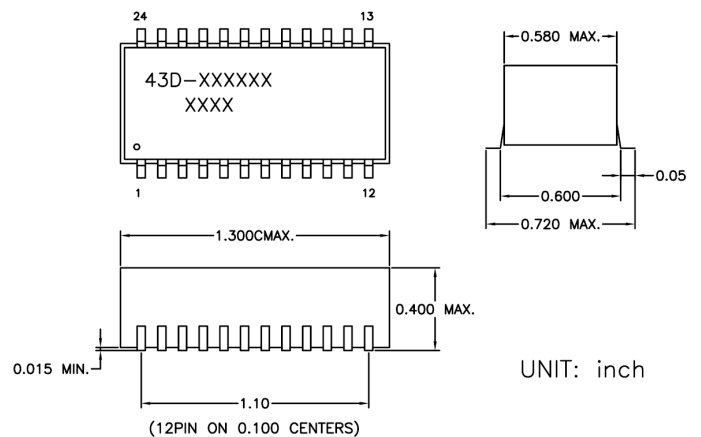
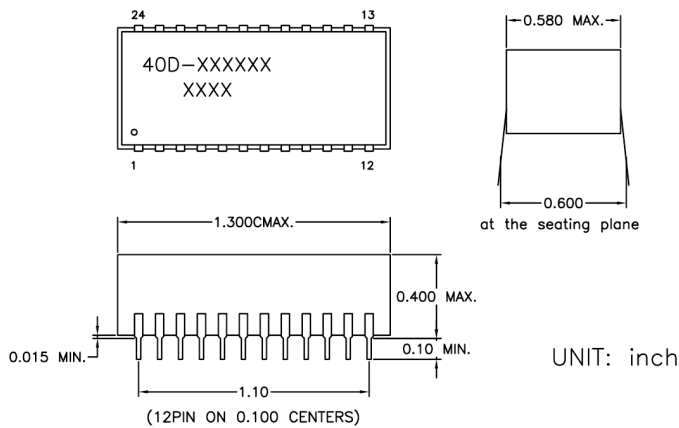
### PIN CONNECTION

PIN	SINGLE	DUAL
1	+INPUT	+INPUT
2	NC	-OUTPUT
9	NC	NC
10	-OUTPUT	COM
11	+OUTPUT	+OUTPUT
12	-INPUT	-INPUT

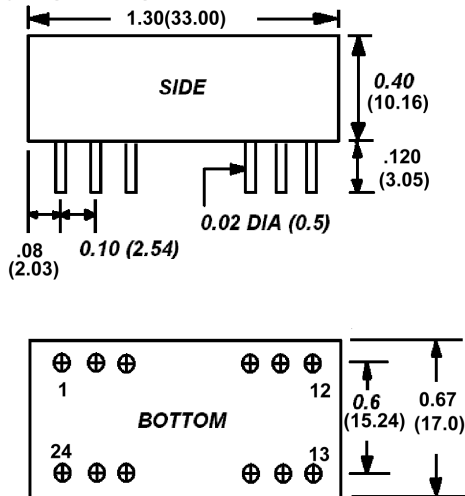
## PIN CONNECTION

PIN	SINGLE OUTPUT	DUAL OUTPUT	PIN	SINGLE OUTPUT	DUAL OUTPUT
1	+INPUT	+INPUT	13	-INPUT	-INPUT
2	NC	-OUTPUT	14	+OUTPUT	+OUTPUT
3	NC	COMMON	15	-OUTPUT	COMMON
10	-OUTPUT	COMMON	22	NC	COMMON
11	+OUTPUT	+OUTPUT	23	NC	-OUTPUT
12	-INPUT	-INPUT	24	+INPUT	+INPUT

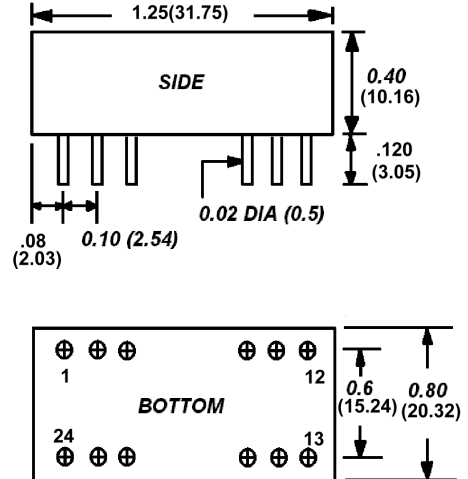
## MARKINGS AND DIMENSION



### 50D SERIES



### 52D SERIES





# 41D SERIES

## 2000Vrms SINGLE AND DUAL OUTPUT 1.8WATT 24PIN DIP DC-DC CONVERTER

### FEATURES

- UP TO 1.8 WATTS OUTPUT POWER
- 24PIN DIP PACKAGE
- 2000Vrms ISOLATION
- UNREGULATED & REGULATED OUTPUT TYPES
- LOW RIPPLE AND NOISE

### GENERAL SPECIFICATIONS

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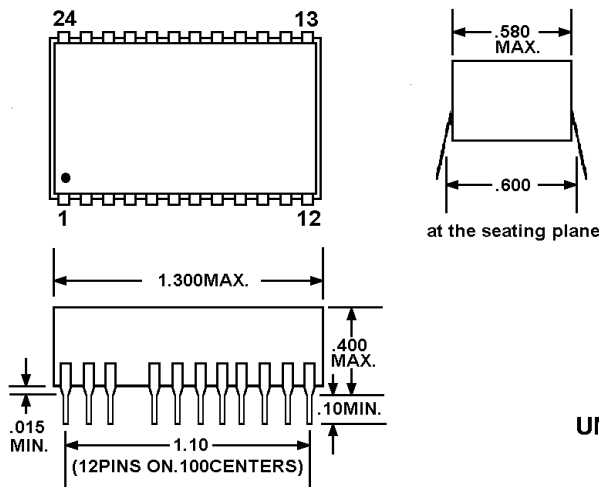
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- OUTPUT VOLTAGE TOLERANCE : ±5%
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- LOAD REGULATION (REGULATED) : ±0.5%
- UNREGULATED (FOR LOAD CHANGE FROM 100% TO 20%) : ±10%

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

PART NO.	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	EFFICIENCY(%)
41D-05S05R	5VDC	5VDC	360mA	50
41D-05S09N	5VDC	9VDC	200mA	75
41D-05S12R	5VDC	12VDC	150mA	55
41D-05S15N	5VDC	15VDC	120mA	75
41D-05D12N	5VDC	±12VDC	±75mA	75
41D-05D15R	5VDC	±15VDC	±60mA	55
41D-12S05N	12VDC	5VDC	360mA	75
41D-12S09R	12VDC	9VDC	200mA	55
41D-12S12N	12VDC	12VDC	150mA	75
41D-12D12R	12VDC	±12VDC	±75mA	55
41D-12D15N	12VDC	±15VDC	±60mA	75

### MARKINGS AND DIMENSIONS



UNIT:inch

### PIN CONNECTION

PIN	SINGLE OUTPUT	DUAL OUTPUT
1,2	+INPUT	+INPUT
9,10	-OUTPUT	COMMON
11,12	+OUTPUT	+OUTPUT
13,14	NC	COMMON
15,16	NC	-OUTPUT
23,24	-INPUT	-INPUT