# **DC/DC Converters**





### **Features**

- · Single Output
- · SIP or DIP Package
- 1000V DC Isolation
- · Small Package Sizes
- · -40°C to +85°C Operation

# **Specification**

## Input

Input Voltage Range : Nominal ±10%

Input Reflected Ripple Current : 20mA pk-pk (through 12µH inductor 5Hz to 20MHz)

Input Reverse Voltage Protection : None

#### Output

Output Voltage : See table
Minimum Load : None<sup>(1)</sup>

Line Regulation : 1.2% / 1%  $\Delta$  Vin

Load Regulation : 10% for a 20-100% load change<sup>(1)</sup>

Setpoint Accuracy : ±3%

Ripple & Noise : 100mV pk-pk max, 20MHz bandwidth

Temperature Coefficient : 0.02% /  $^{\circ}$ C Maximum Capacitive Load :  $220\mu$ F

## General

Efficiency : See table

Isolation Voltage : 1000V DC minimum

Isolation Resistance :  $10^{9}\Omega$ 

Isolation Capacitance : 60 pF typical

Switching Frequency : 40-150KHz variable

MTBF :>1.1MHrs to MIL-HDBK-217F at 25°C, GB

### Environmental

Operating Temperature : -40°C to +85°C
Storage Temperature : -40°C to +125°C
Case Temperature : 100°C max

Cooling : Convection-cooled

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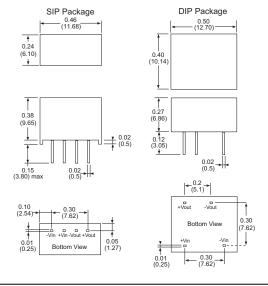


# **DC/DC Converters**



Input Voltage	No Load Input Current	Output Voltage	Output Current	Efficiency	Model Number	Description
5V DC	25mA	5V	200mA	75%	MCE05S05D	DC/DC Converter, 1W, Single O/P
	25mA	5V	200mA	75%	MCE05S05S	
	25mA	12V	84mA	78%	MCE05S12D	
	25mA	12V	84mA	78%	MCE05S12S	
	25mA	15V	66mA	78%	MCE05S15D	
	25mA	15V	66mA	78%	MCE05S15S	
12V DC	16mA	5V	200mA	75%	MCE12S05D	
	16mA	5V	200mA	75%	MCE12S05S	
	16mA	12V	84mA	80%	MCE12S12D	
	16mA	12V	84mA	80%	MCE12S12S	
	16mA	15V	66mA	78%	MCE12S15D	
	16mA	15V	66mA	78%	MCE12S15S	
24V DC	10mA	5V	200mA	75%	MCE24S05D	
	10mA	5V	200mA	75%	MCE24S05S	
	10mA	12V	84mA	80%	MCE24S12D	
	10mA	12V	84mA	80%	MCE24S12S	
	10mA	15V	66mA	78%	MCE24S15D	
	10mA	15V	66mA	78%	MCE24S15S	

# **Mechanical Details**



#### **Notes**

- Operation at no load will not damage unit but it may not meet all specifications
- 2. All dimensions in inches (mm)
- 3. Pin pitch tolerance: ±0.014 (±0.35)
- 4. Case tolerance: ±0.02 (±0.5)
- 5. Weight: SIP 0.003 lbs (1.4 g), DIP 0.004 lbs (1.8 g)

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