

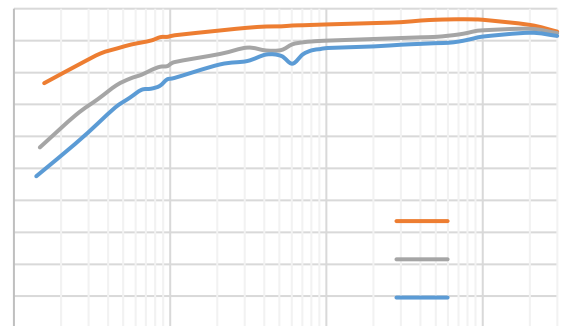
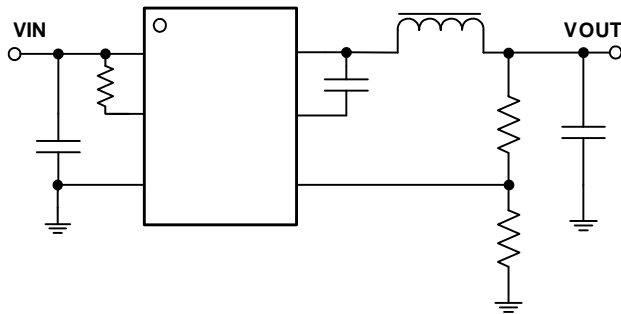
# V<sub>in</sub>, 3A Synchronous Step-down DCDC Converter

## FEATURES

## DESCRIPTION

## APPLICATIONS

## TYPICAL APPLICATION



Efficiency, V<sub>OUT</sub>=3.3V

REVISION HISTORY



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## ELECTRICAL CHARACTERISTICS

SYMBOL	PARAMETER	TEST CONDITION	MIN	TYP	MAX	UNIT
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Power Supply and Output

TYPICAL CHARACTERISTICS

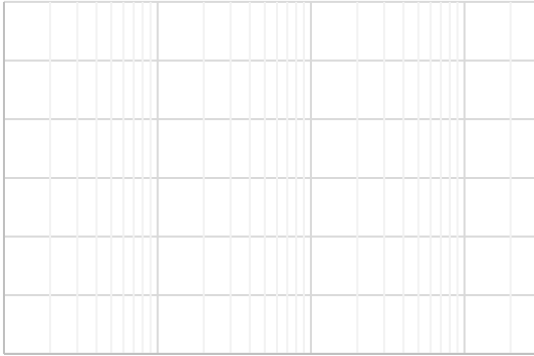


Figure 1. Efficiency vs Load Current(VIN=12V)

Figure 2. Line Regulation

Figure 3. Load Regulation

Figure 4. FB Voltage Vs. Temperature

Figure 5. UVLO Vs. Temperature

Figure 6. Quiescent Current Vs. Temperature

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## FUNCTIONAL BLOCK DIAGRAM

OPERATION

**Adaptive On-time Control**

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**Bootstrap Voltage Regulator**

**Thermal Shutdown**

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## APPLICATION INFORMATION

### Typical Application

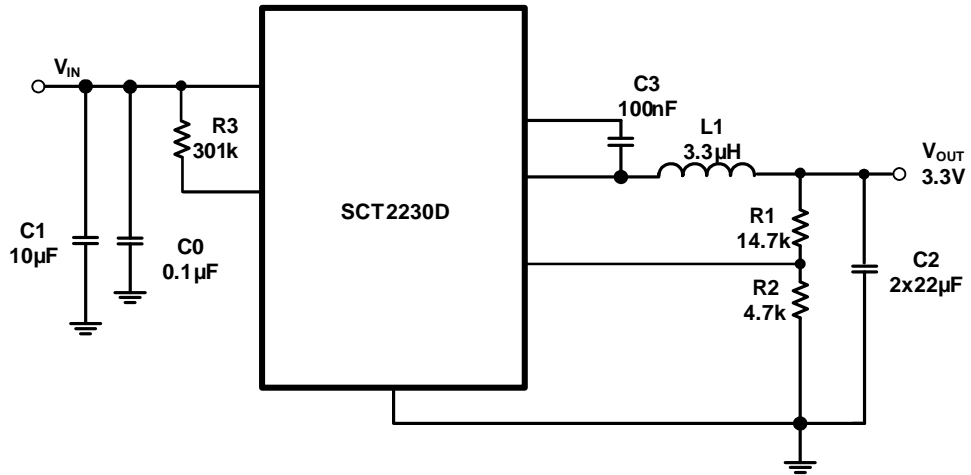


Figure 8. 12V Input, 3.3V/3A Output

### Design Parameters

Design Parameters	Example Value

**Input Capacitor Selection**

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**Table 1. Recommended Inductors**

Part Number	L ( $\mu$ H)	DCR Max (m $\Omega$ )	Saturation Current/Heat Rating Current (A)	Size Max (LxWxH mm)	Vendor

**Output Feedback Resistor Divider Selection**



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## Application Waveforms

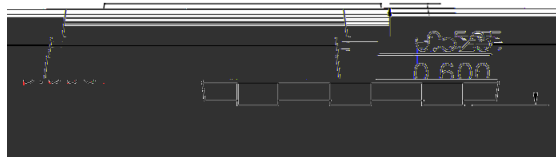
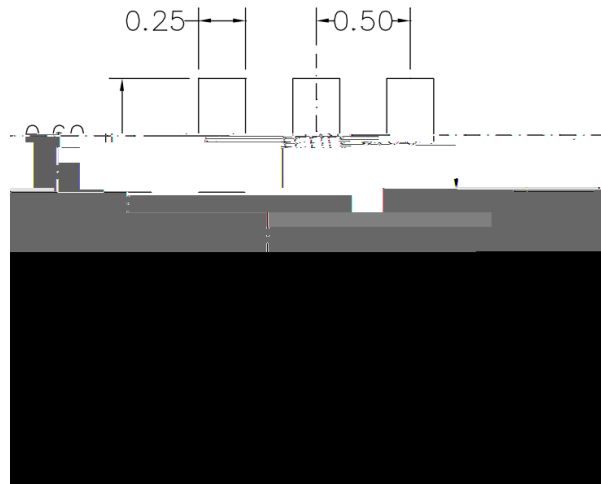
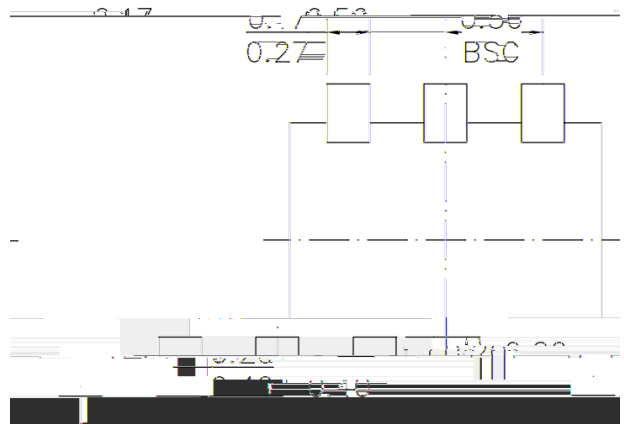
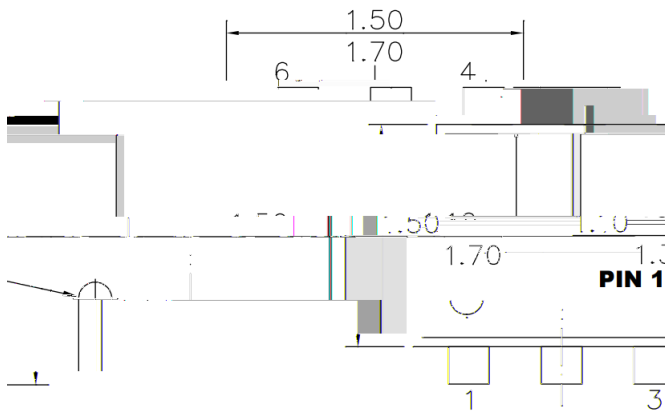
**Layout Guideline**

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## Thermal Considerations

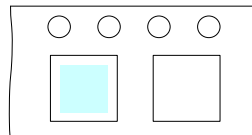
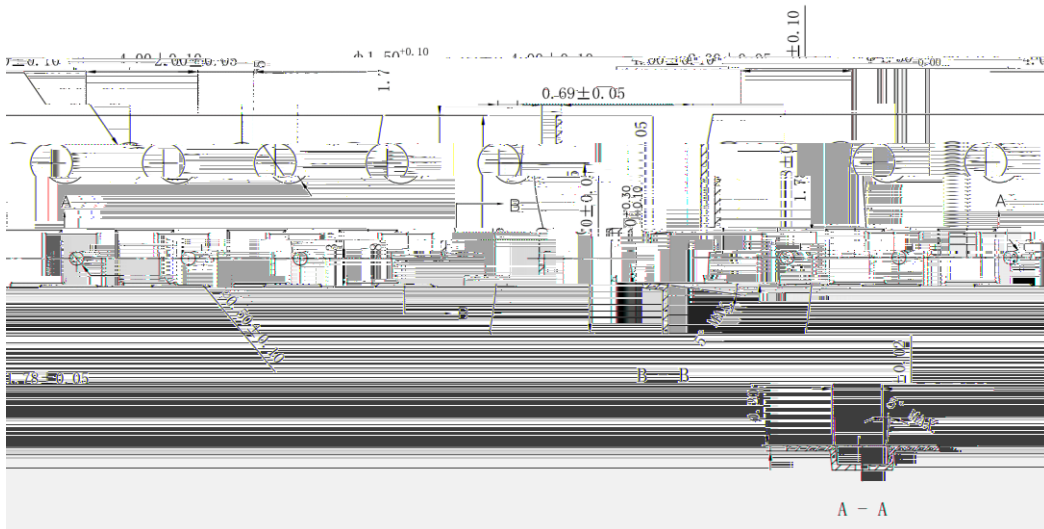
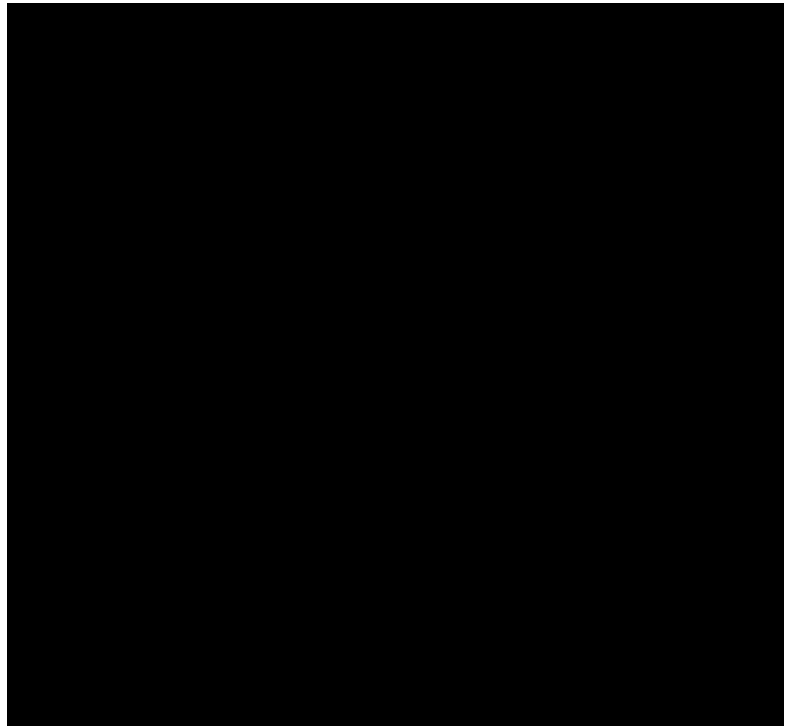
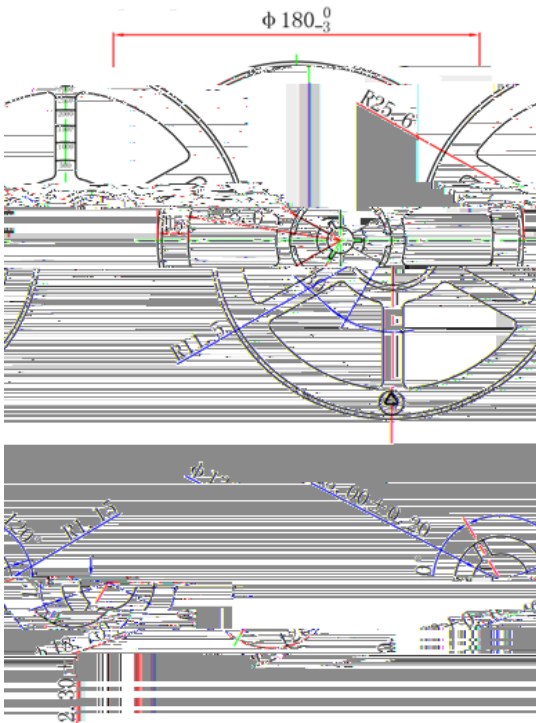
PACKAGE INFORMATION



NOTE:



TAPE AND REEL INFORMATION



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## TAPE AND REEL INFORMATION