

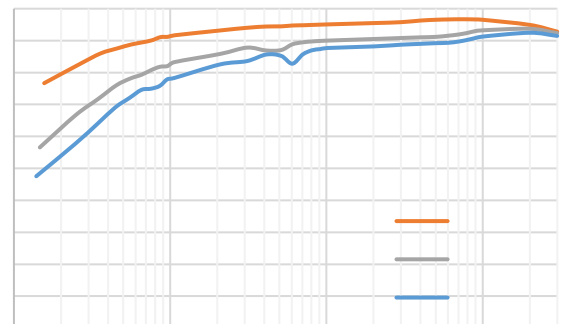
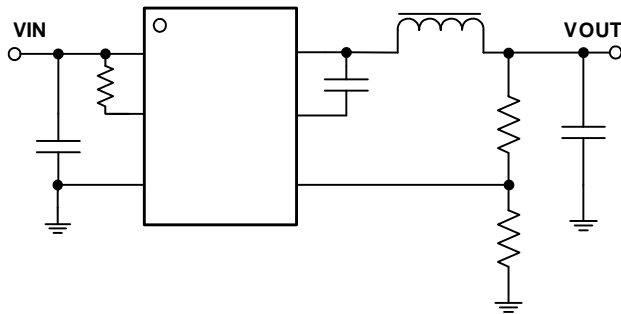
V_{IN}, 3A Synchronous Step-down DCDC Converter

FEATURES

DESCRIPTION

APPLICATIONS

TYPICAL APPLICATION



Efficiency, V_{OUT}=3.3V

REVISION HISTORY

SCT2230B

ELECTRICAL CHARACTERISTICS

SYMBOL	PARAMETER	TEST CONDITION	MIN	TYP	MAX	UNIT
--------	-----------	----------------	-----	-----	-----	------

Power Supply and Output

TYPICAL CHARACTERISTICS

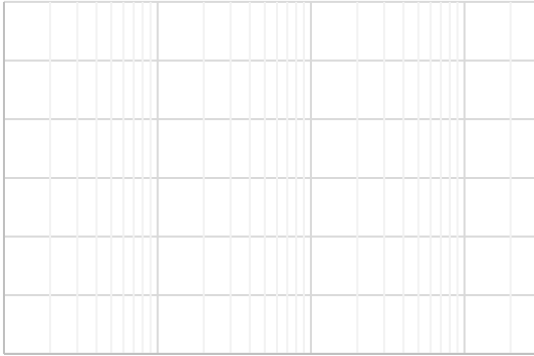


Figure 1. Efficiency vs Load Current(VIN=12V)

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

SCT2230B

FUNCTIONAL BLOCK DIAGRAM

OPERATION

Adaptive On-time Control

SCT2230B

Bootstrap Voltage Regulator

Thermal Shutdown

°
°

SCT2230B

APPLICATION INFORMATION

Typical Application

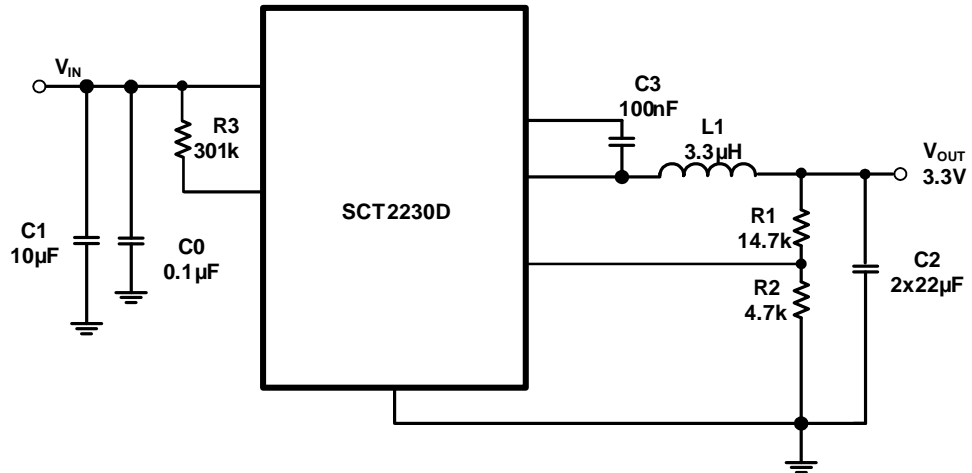


Figure 8. 12V Input, 3.3V/3A Output

Design Parameters

Design Parameters	Example Value

Input Capacitor Selection

—

Table 1. Recommended Inductors

Part Number	L (uH)	DCR Max (m)	Saturation Current/Heat Rating Current (A)	Size Max (LxWxH mm)	Vendor

Output Feedback Resistor Divider Selection

SCT2230B

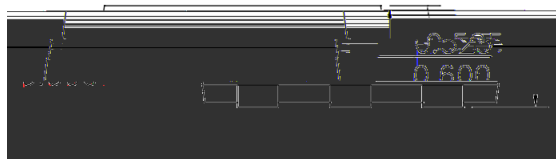
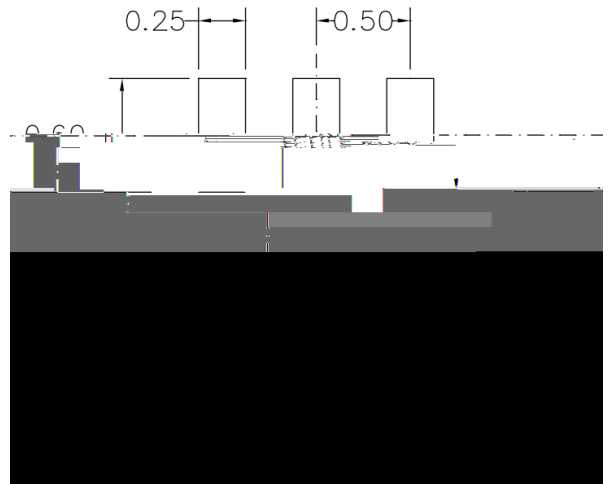
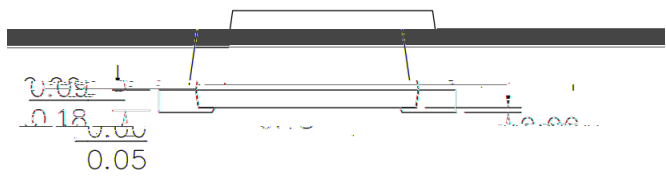
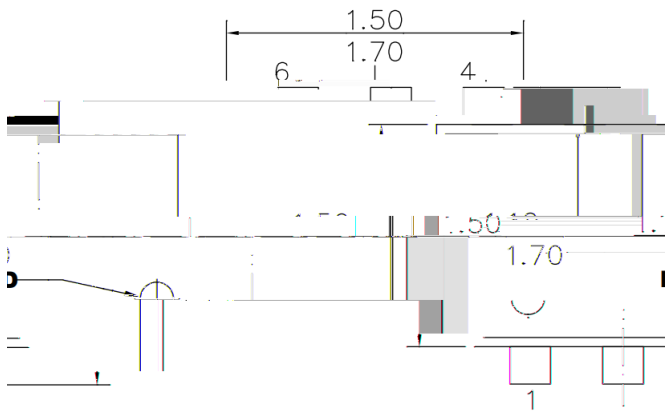
Application Waveforms

Layout Guideline

SCT2230B

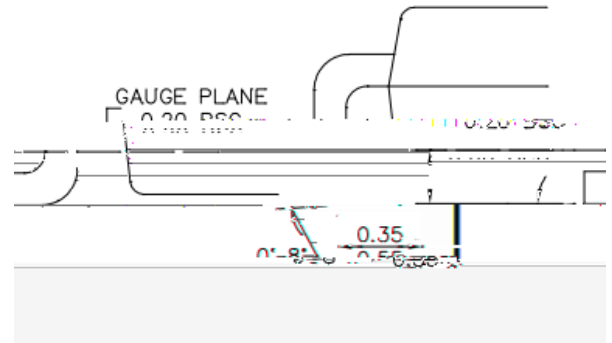
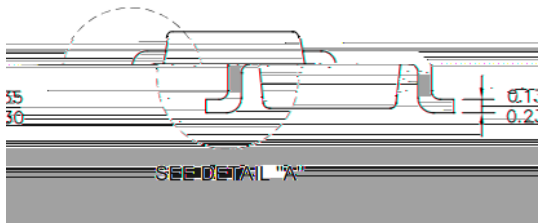
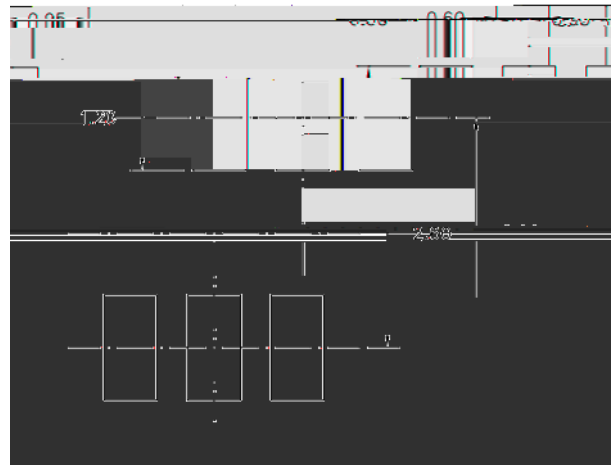
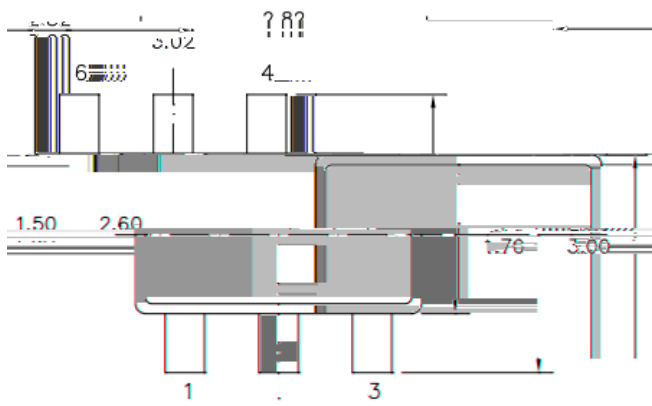
Thermal Considerations

PACKAGE INFORMATION



NOTE:

SCT2230B



NOTE:

SCT2230B

TAPE AND REEL INFORMATION