



**SCT2230D**

V Vin, 3A Synchronous Step-down DCDC Converter

FEATURES



# SCT2230D

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## REVISION HISTORY

## DEVICE ORDER INFORMATION

ORDERABLE DEVICE	PACKAGING TYPE	STANDARD PACK QTY	PACKAGE MARKING	PINS	PACKAGE DESCRIPTION	MSL
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PIN FUNCTIONS

NAME	PIN		PIN FUNCTION
	SOT563	SOT23-6	

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## ELECTRICAL CHARACTERISTICS

SYMBOL	PARAMETER	TEST CONDITION	MIN	TYP	MAX	UNIT
<b>Power Supply and Output</b>						
<b>Enable, Soft Start and Working Modes</b>						
<b>Power MOSFETs</b>						
<b>Feedback and Error Amplifier</b>						
<b>Current Limit</b>						
<b>Switching Frequency</b>						
<b>Soft Start Time</b>						
<b>Protection</b>						

TYPICAL CHARACTERISTICS

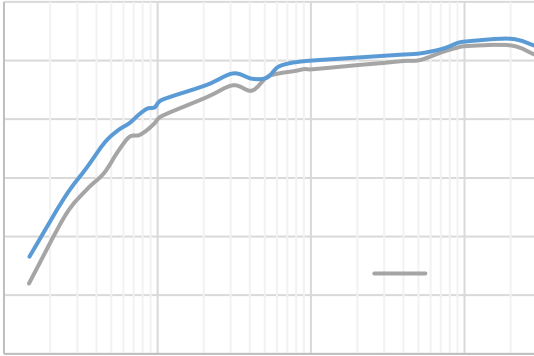


Figure 1. Efficiency vs Load Current(VIN=12V)

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









**Input Capacitor Selection**

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**Bootstrap Capacitor Selection**

**Inductor Selection**

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**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**

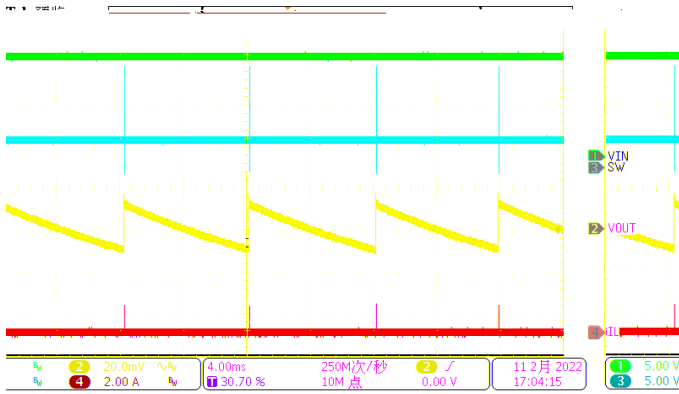
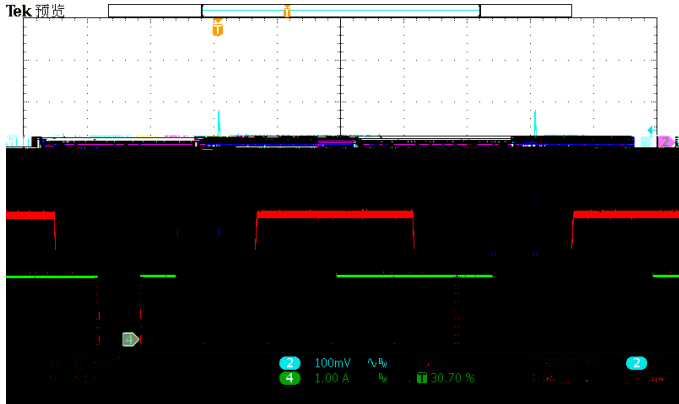
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## Application Waveforms



**Layout Guideline**

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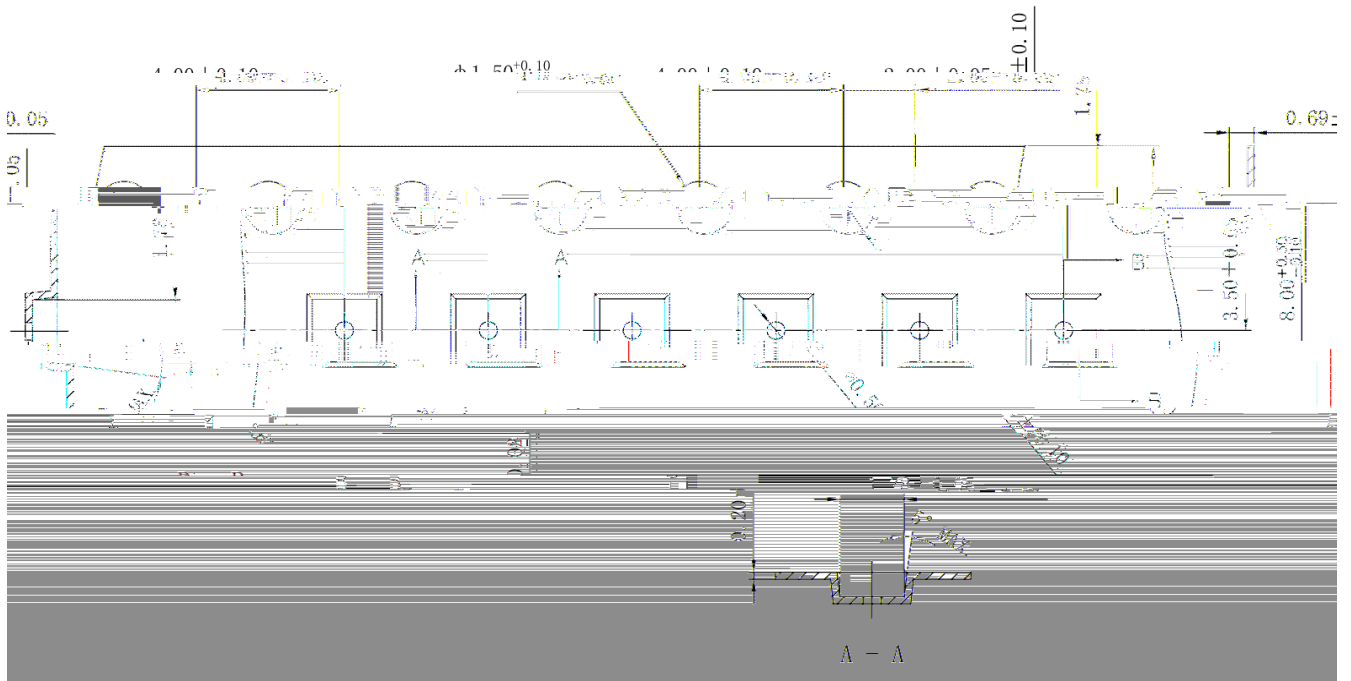
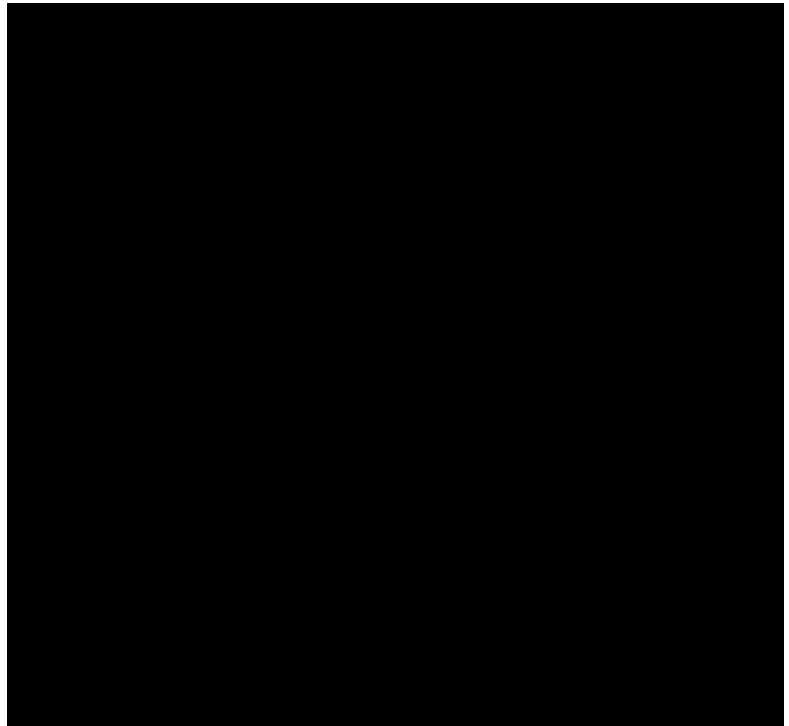
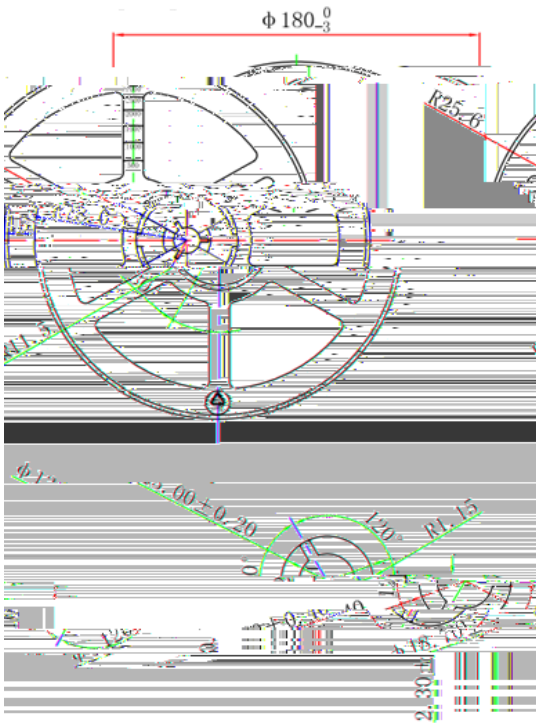
## Thermal Considerations

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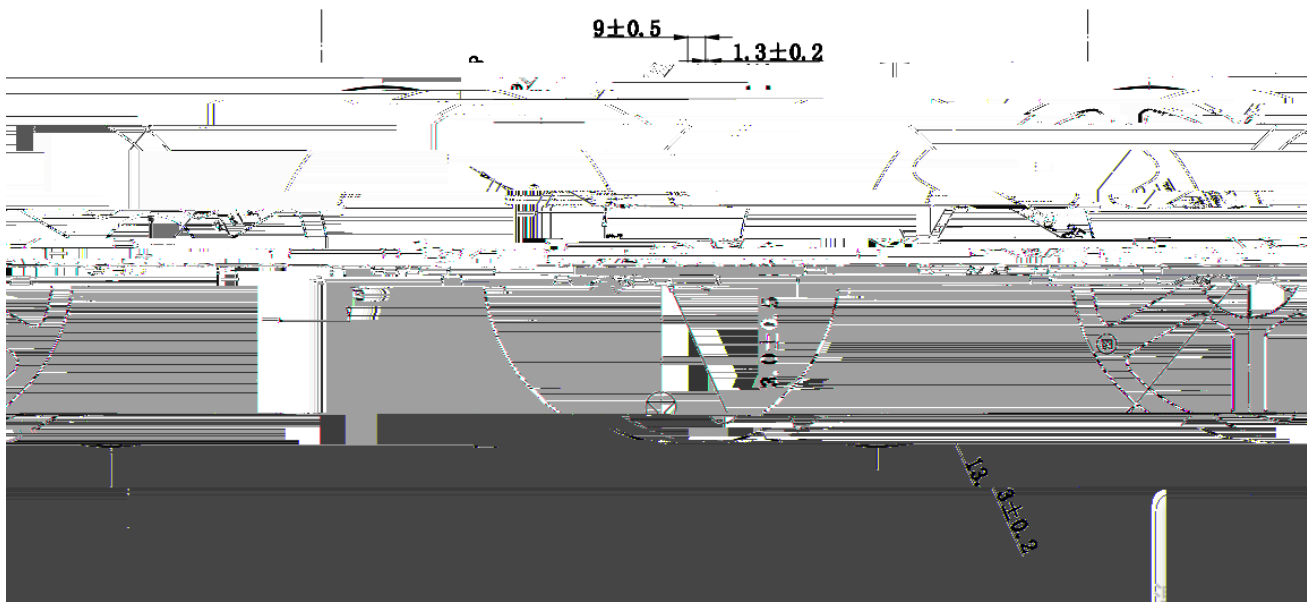




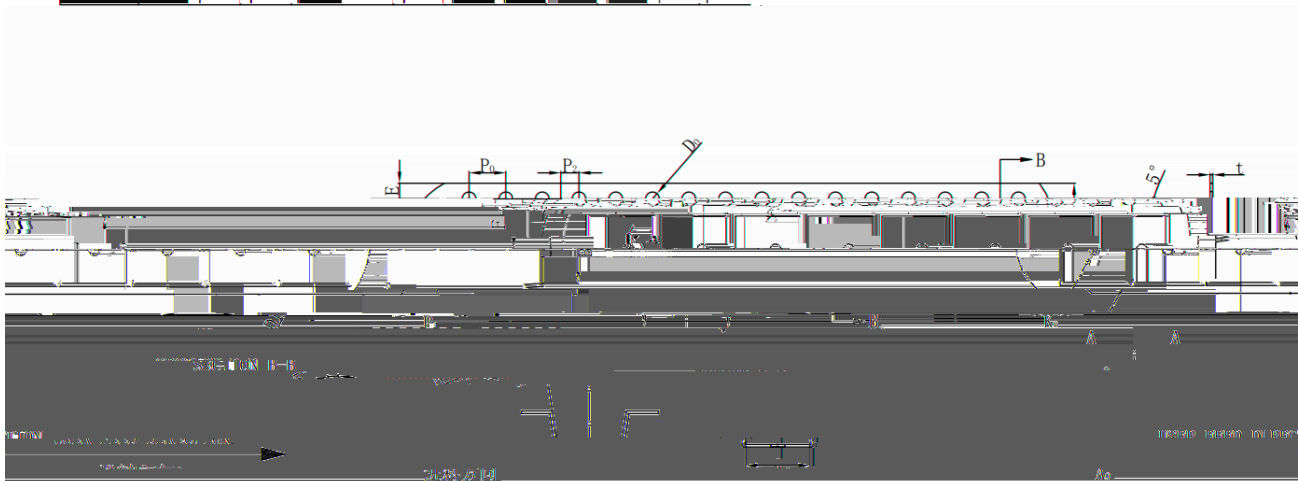
TAPE AND REEL INFORMATION



## TAPE AND REEL INFORMATION



ITEM	W	Ao	Bo	Ko	F	F	D1	D2	P1	P2	P3	t	MIN	7.3
30	3.15	3.25	1.28	1.65	3.45	-	3.90	3.90	1.95	0.20				
MIN	8.00	3.25	3.30	3.35	3.50	3.50	3.50	3.50	4.00	2.00	0.25			
MAX	8.25	3.35	3.40	3.45	3.55	3.55	3.55	3.55	4.10	2.10	0.30			



SECTION A-A