

## 3.8V-32V Vin, 3A Synchronous Step-down DCDC Converter with EMI Reduction

### FEATURES

- 
- 
- 
- 
- 
- 
- 
- 
- 
-



BST	6	Power supply for the high-side power MOSFET gate driver. Must connect a 0.1uF or greater ceramic capacitor between BST pin and SW node.
-----	---	---

RECOMMENDED OPERATING CONDITIONS

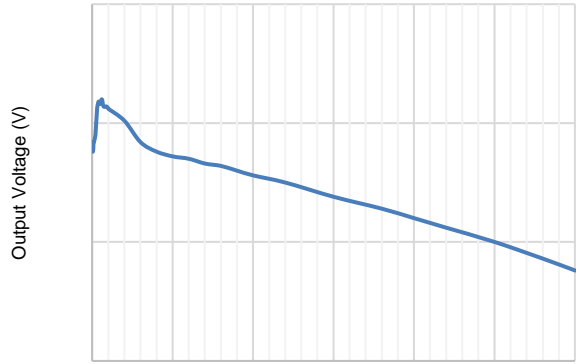

ESD RATINGS


- (1)
- (2)

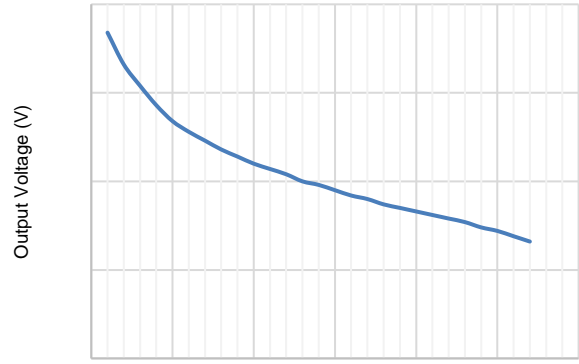
THERMAL INFORMATION


---


---

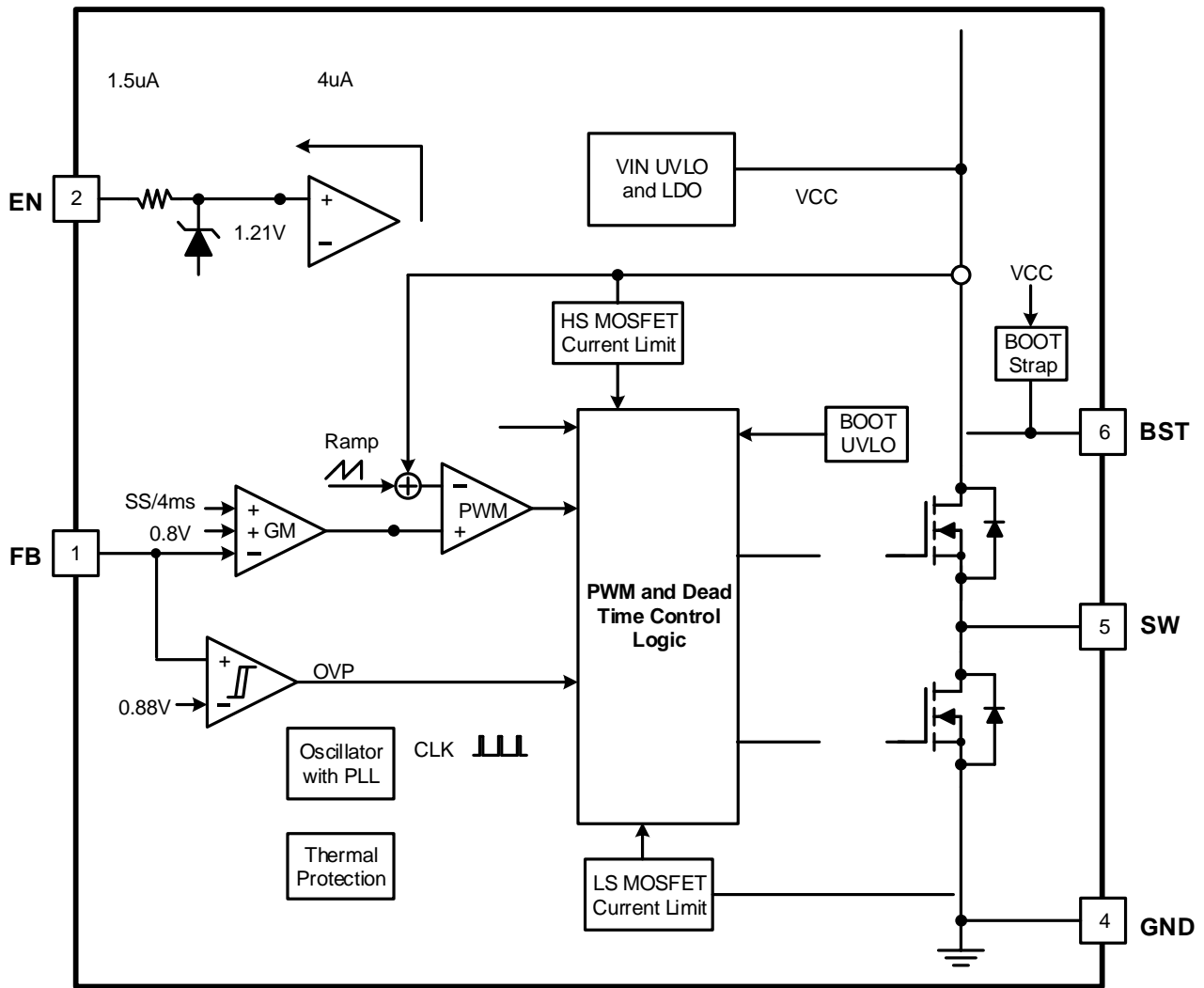


Output Current (mA)



Input Voltage (V)

# FUNCTIONAL BLOCK DIAGRAM



---

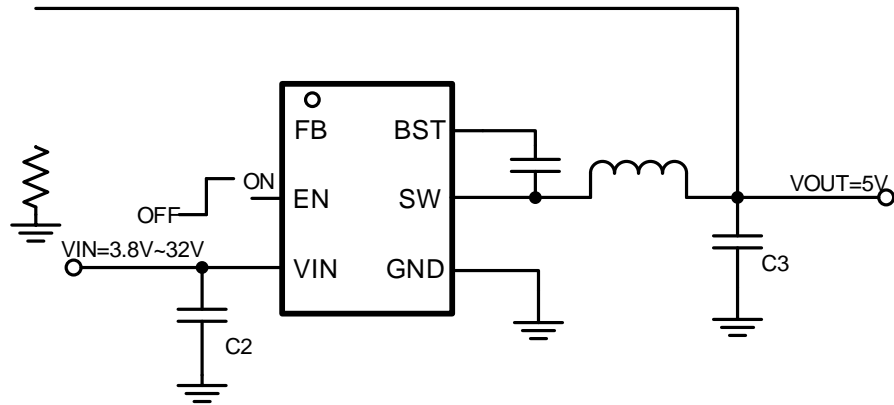






---

## APPLICATION INFORMATION



Design Parameters	Example Value
Input Voltage	24V

---

(3)

- 
- 
-





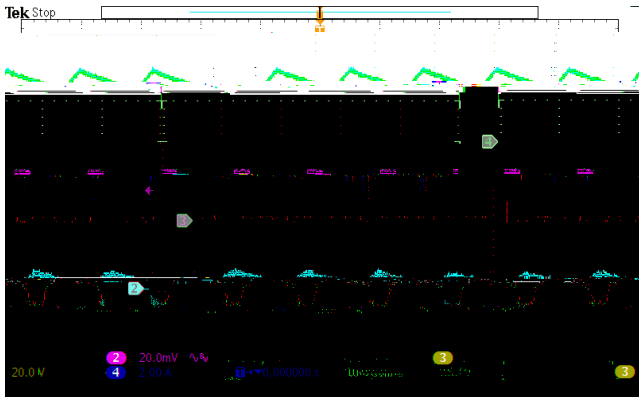


Figure 14. SW node waveform and Output Ripple  
VIN=24V, IO<sub>UT</sub>=3A

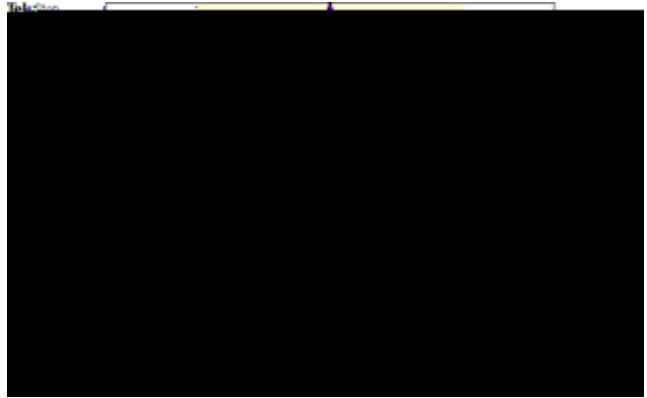


Figure 15. SW node Waveform and Output Ripple  
VIN=24V, IO<sub>UT</sub>=10mA

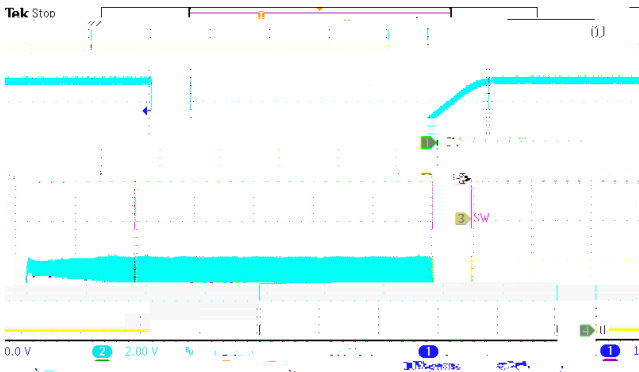


Figure 16. Power Up  
VIN=24V, VOUT=5V, IO<sub>UT</sub>=3A

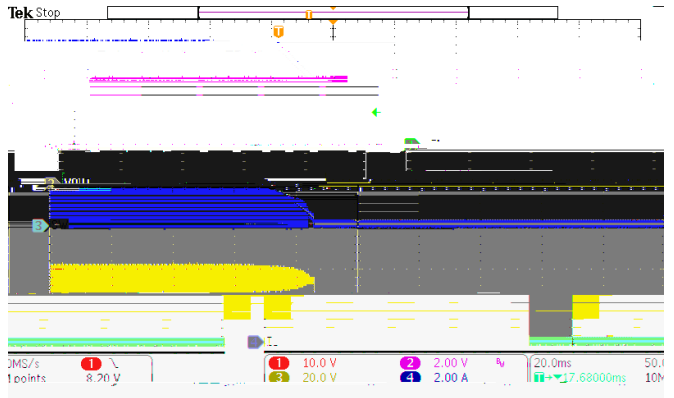


Figure 17. Power Down  
VIN=24V, VOUT=5V, IO<sub>UT</sub>=3A

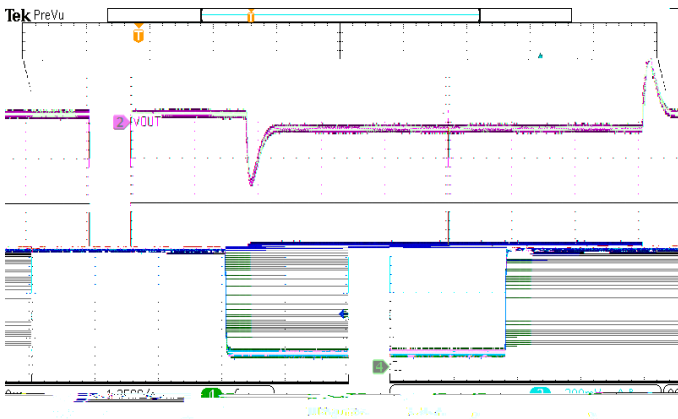


Figure 18. Load Transient  
VOUT=5V, IO<sub>UT</sub>=0.3A to 2.7A, SR=250mA/us

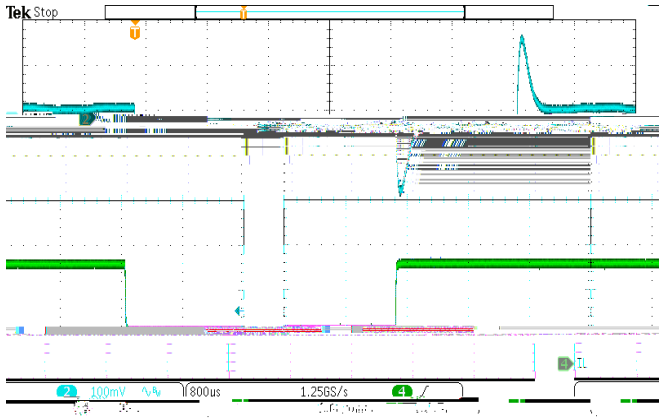


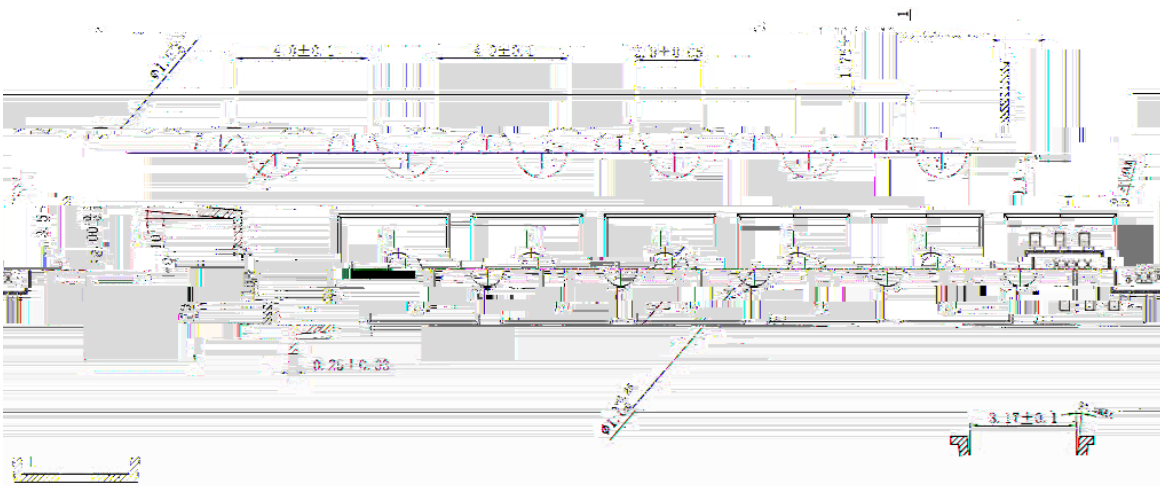
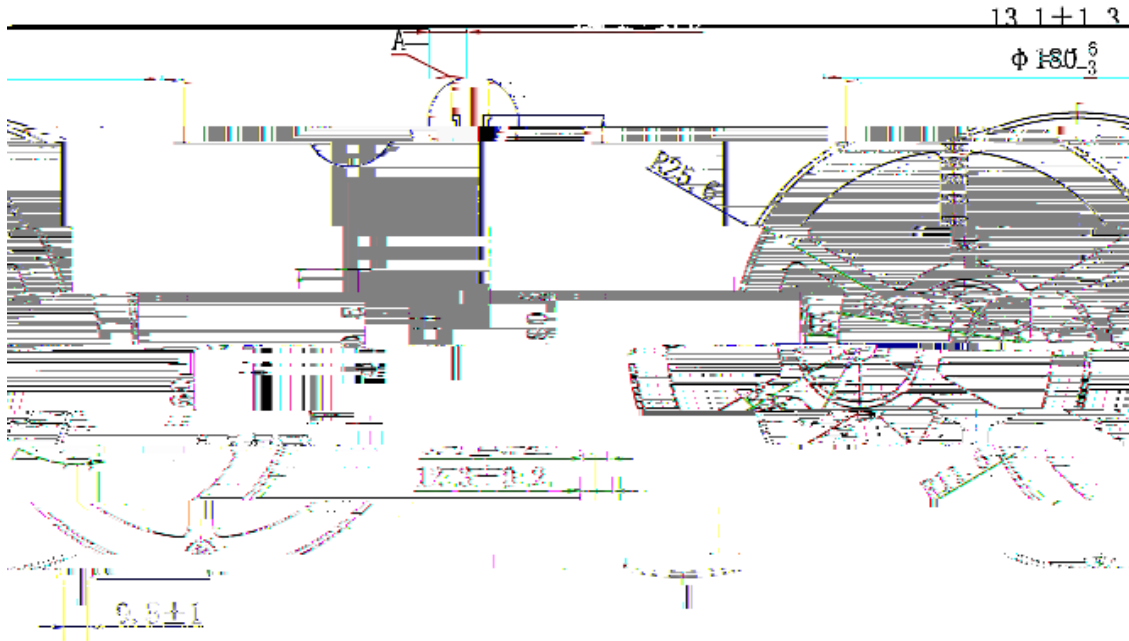
Figure 19. Load Transient  
VOUT=5V, IO<sub>UT</sub>=0.75A to 2.25 A, SR=250mA/us

---

---

## PACKAGE INFORMATION

# TAPE AND REEL INFORMATION



---

## RELATED PARTS

PN	DESCRIPTION	COMMENTS
<b>SCT2320</b> <b>SCT2321</b>	3.8V-32V Vin, 2A Synchronous Step-down DCDC Converter with	