

# LTspice Model

## Isolated Flyback Converter

### ROHM

### BD7F200EFJ-LBE2

#### Model Information

**Model** A macro model  
**Call Name** BD7F200EFJ-LBE2  
**Pin Assign** 1:AGND 2:SDX\_EN 3:COMP 4:REF 5:FB 6:PGND 7:SW 8:VIN  
**File List** Model Library MDC\_BD7F200EFJ-LBE2\_LT.lib  
 Model Report MDC\_BD7F200EFJ-LBE2\_LT.pdf(this file)  
**Verified Simulator Version** LTspice XVII

#### Note

#### References

The information which was used for modeling is as follow:

[Data Sheet]

- Date/Version 17.Apr.2017 Rev.003
- Product name BD7F200EFJ-LB
- Company name ROHM Co., Ltd.

[Characteristics listed]

- Characteristics
  - Startup/Shutdown(VIN Control)
  - Startup/Shutdown(SDX/EN Control)
  - UVLO

#### Simulation Condition

This table shows the range of evaluated simulation range that was not occurs any convergence problems in this area.

Item	Condition	Unit
Temperature	25	deg C

○ : Implemented  
× : Not Implemented  
— : Not applicable

**Model Functions Table**
**RANK=1**

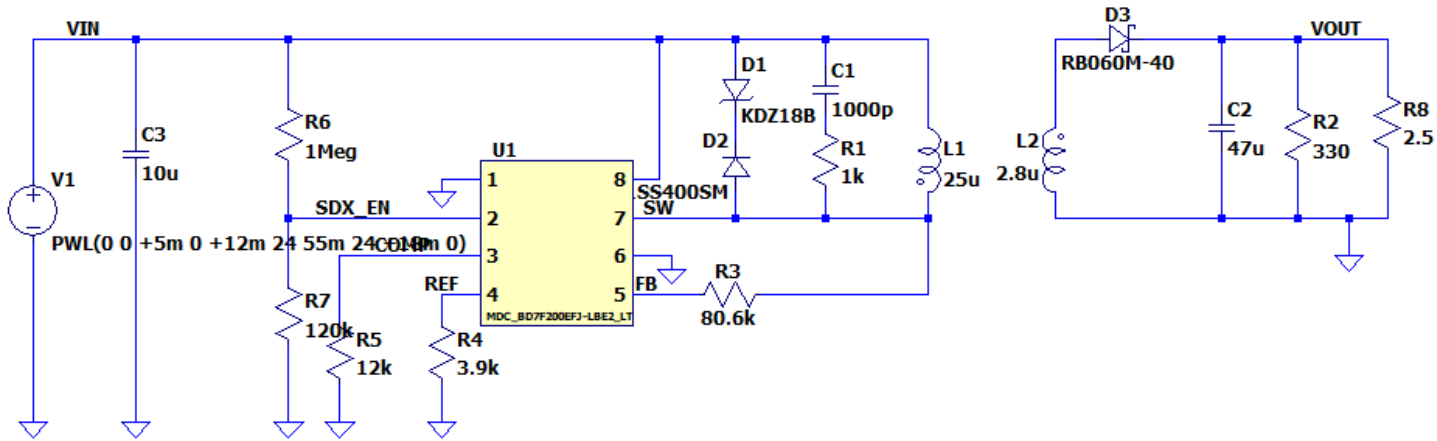
Functions	RANK	Implemented
Control Method(PWM,PFM)	1	○
Enable Function	1	○
Soft Start	1	○
Line Regulation	1	○
Load Regulation	1	○
Synchronous External Oscillation	1	—
UVLO	1	○
Line Transient	2	—
Load Regulation	2	—
Light Load Current Mode	2	—
Spread Spectrum	2	—
Over Current Protection	2	—
Over Voltage Protection	2	—
Forward/Flyback Other Device in Circuit	3	—
Brown IN/OUT Function	—	—
ZT Pin OVP Function	—	—

Startup/Shutdown(VIN Control) Testbench

Referred to Data Sheet

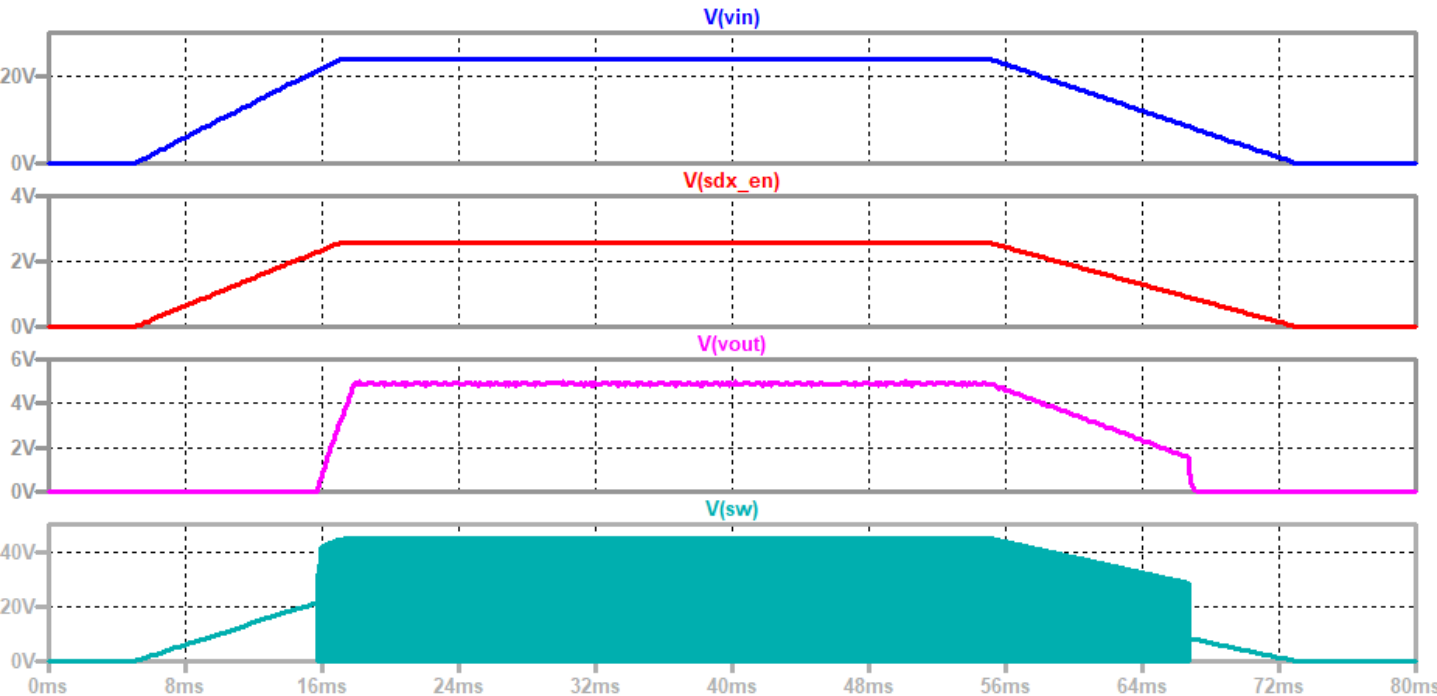
```
.OPTION TNOM=25
.TEMP 25
.tran 0 80m 0
```

K L1 L2 0.98



Simulation results are following.  
Explanatory notes — : simulated

Startup/Shutdown(VIN Control)







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