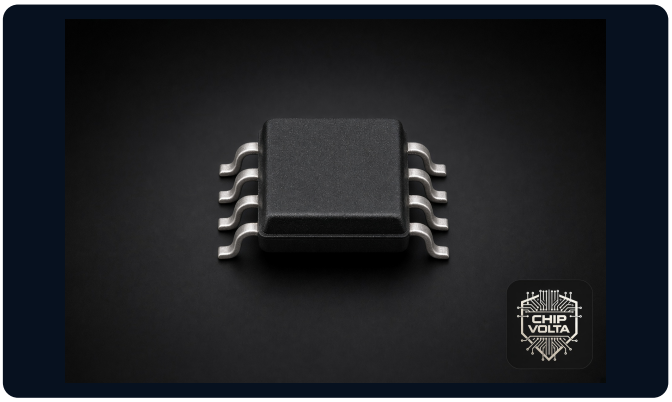
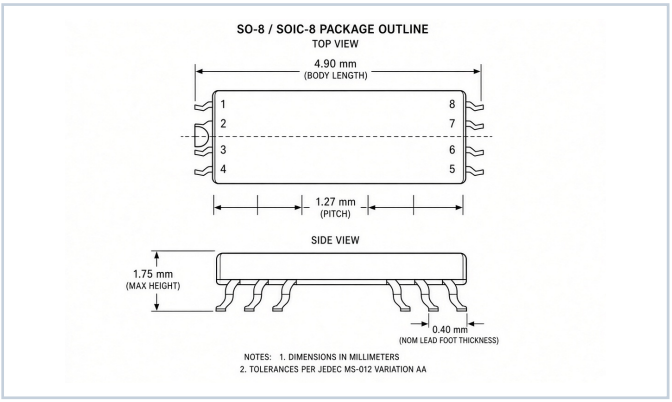
CV-ISO-5

Isolated Bias Flyback Controller · Power Management ICs

Package: SO-8 (SOIC-8), 1.27 mm pitch





Description

Primary-side regulated flyback controller for isolated 5 V and 15 V gate-drive and sensor bias supplies up to 15 W. Intended as a companion bias rail for SiC MOSFET gate drivers.

Features

- Primary-side regulation, no optocoupler required
- 18 V to 80 V start-up range
- Up to 15 W isolated output
- OVP, OCP and OTP protection
- Soft-start and frequency dither for EMI

Typical applications

- **SiC gate-drive bias**
- **Isolated sensor power**
- **Industrial I/O cards**

Absolute maximum ratings

Parameter	Value	Unit
HV start pin	–0.3 to +80	V
VCC	–0.3 to +20	V
DRAIN	–0.3 to +150	V
Junction temperature	–40 to +150	°C

Stresses beyond these limits may cause permanent damage. These are stress ratings only.

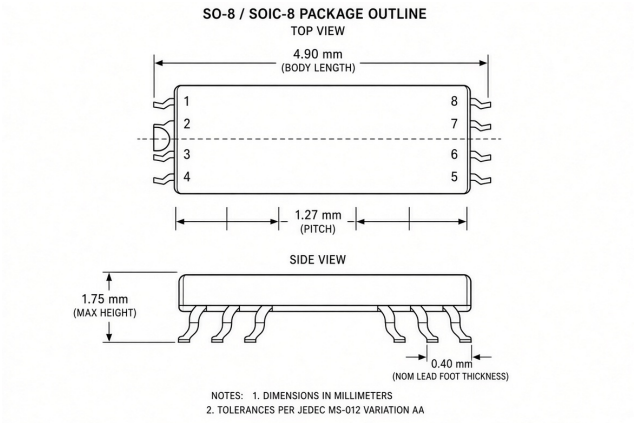
Electrical characteristics (Tj = 25 °C unless noted)

Parameter	Min	Typ	Max	Unit
Start-up voltage	18	—	80	V
Output power	—	10	15	W
fSW	65	100	130	kHz
VCC UVLO on/off	—	14 / 8.5	—	V

Pin assignment (simplified)

Pin	Name	Function
1	FB	Primary-side feedback
2	COMP	Loop compensation
3	CS	Current sense
4	GND	Controller ground
5	GATE	External MOSFET gate drive
6	VCC	Bias supply
7	NC	No connect
8	HV	High-voltage start-up

Package outline / mechanical sketch



Ordering and document control

This public brief supports schematic evaluation. The controlled datasheet (full electrical tables, SOA graphs, reliability summary, recommended land pattern and PPAP package) is released through Chip Volta applications engineering after an RFQ. Request it on the Contact / RFQ page quoting CV-ISO-5. Samples follow the same path. Shorter lead-time builds use the released test program.

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