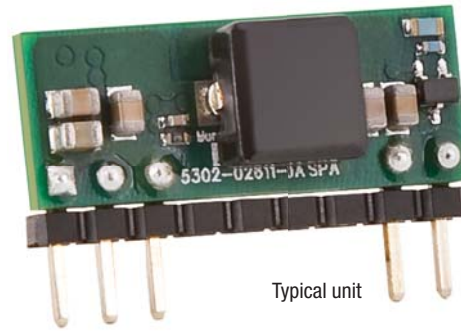


**FEATURES**

- Non-isolated SIP PoL DC/DC power module
- 8.3-13.8Vdc input voltage range
- Programmable output voltage from 0.7525-5.5Vdc
- Under Voltage shutdown (Vin)
- Drives 1000  $\mu$ F ceramic capacitive loads
- High power conversion efficiency 93% at 5 Vout (typical)
- Outstanding thermal derating performance
- Over temperature and over current protection
- On/Off control
- UL60950, CSA-C22.2 No.60950 IEC/EN60950 (pending)
- Industry-standard (DOSA) SIP format
- RoHS-6 hazardous substance compliance



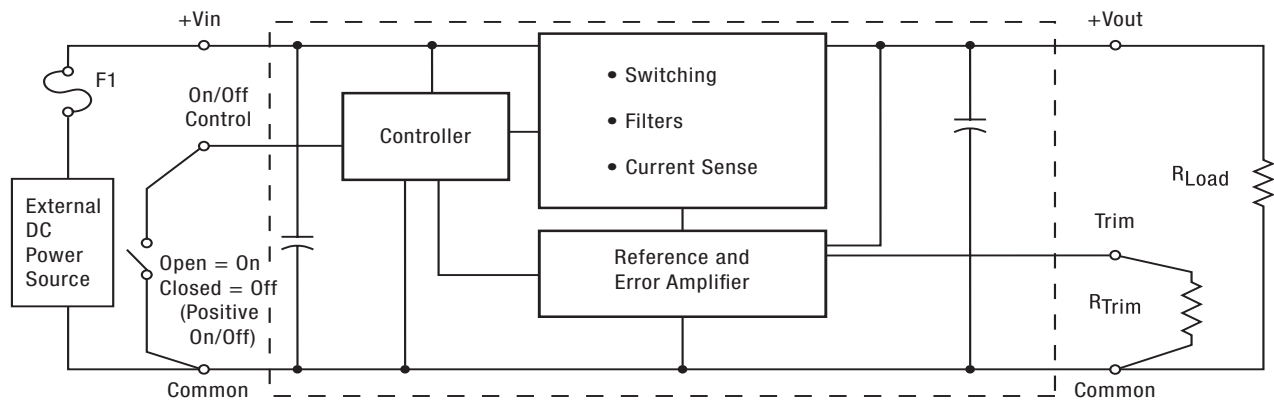
**PRODUCT OVERVIEW**

The OKX-T/5-D12 series are miniature SIP non-isolated Point-of-Load (POL) DC/DC power converters for embedded applications. The module is fully compatible with Distributed-power Open Standards Alliance industry-standard specifications.

Applications include powering CPU's, datacom/telecom systems, programmable logic and mixed voltage systems. The wide input range is 8.3 to 13.8 Volts DC at 5 amps. Based on fixed-frequency

synchronous buck converter switching topology, the high power conversion efficient Point of Load (PoL) module features programmable output voltage and On/Off control. These converters also include under voltage lock out (UVLO), output short circuit protection, over-current and over temperature protections. These units are designed to meet all standard UL/EN/IEC 60950-1 safety certifications and RoHS-6 hazardous substance compliance.

**Connection Diagram**



**Figure 1. OKX-T/5-D12**

Note: Murata Power Solutions strongly recommends an external input fuse, F1. See specifications.



PERFORMANCE SPECIFICATIONS SUMMARY AND ORDERING GUIDE													
Model Number ①	Output					Input				Efficiency		Case Dimensions are in inches (mm)	
	V <sub>OUT</sub> (Volts) ①	I <sub>OUT</sub> (Amps, max) ①	Power (Watts)	R/N (mVp-p) Max. ②	Regulation (Max.)		Vin Nom. (Volts)	Range (Volts) ③	I <sub>in</sub> , no load (mA)	I <sub>in</sub> , full load (Amps)	Min.		Typ.
					Line	Load							
OKX-T/5-D12-C	.7525-5.5	5	25	25	±0.2%	±0.5%	12	8.3-13.8	45	2.24	91.5%	93.0%	0.40x0.90x0.282 (10.16x 22.86x 7.163)

- ① All specifications are at nominal line voltage, V<sub>out</sub>=nominal (5V for D12 models) and full load, +25°C unless otherwise noted.
- ② Ripple and Noise (R/N) is shown at V<sub>out</sub>=1V. See specs for details.
- ③ The input voltage range must be 0.5V greater than the output voltage.

**PART NUMBER STRUCTURE**

**OK X - T / 5 - D12 N Lx - C**

**Okami Non-isolated PoL**

**SIP Mount**

**Trimnable Output Voltage Range**  
D12 Models = 0.7525-5.5V

**Maximum Rated Output Current in Amps**

**Input Voltage Range**  
D12 = 8.3-13.8V

**RoHS Hazardous Substance Compliance**  
C = RoHS-6 (does not claim EU RoHS exemption 7b—lead in solder)

**Pin Length Option**  
Blank = Standard pin length  
L6 = Pin length 0.138 inches (3.5mm)\*

**On/Off Logic**  
P = Positive Logic  
N = Negative Logic

**\*Special quantity order is required; samples available with standard pin length only.**

**Note:**  
Some model number combinations may not be available. See website or contact your local Murata sales representative.