

SL6A SERIES

HDLV
Family

Description

The SL6A is a low-cost, 6-amp, non-isolated DC-DC converter combining low cost and high performance. The SIP form factor and high power density combine to minimize the board area required for power. It uses an industry-standard pin-out, but also has a much lower height; only 0.5 inches. The SL6A provides ultrafast transient response, improved line and load regulation, and very high efficiency.



Features

- Low Cost
- 6-amp Output Current
- 90 % Efficiency
- Industry-standard Pin-out
- Low 0.5 " Profile
- Remote Sense
- Trim Function
- Short-circuit Protection with auto-restart
- Fast Transient Response
- High-temperature Operation
- Non-isolated Output
- 60 W/in³ Power Density

Common Specifications

	Min	Nom	Max	Units	Notes
Input					
Voltage	3.0	3.3	3.6	Vdc	
	4.5	5	5.5	Vdc	
Output					
Current			6	A	
Voltage Setpoint Accuracy			±2	%V _{nom}	
Line Regulation		±0.1		%V _{nom}	
Load Regulation		±0.3		%V _{nom}	±0.2 % w/o remote sense
Dynamic Response					
0 to 6 A load		200		mV	Δi/Δt = 3 A/μs
		19		μs	
6 to 0 A load		200		mV	Δi/Δt = 3 A/μs
		19		μs	
Temperature Regulation			±0.02	%V _{out} /°C	
General					
MTBF		1,000		k Hrs	Bellcore TR332, 25 °C
Operating Temperature	-40		85	°C	
Storage Temperature	-40		125	°C	
Switching Frequency		300		kHz	



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Specifications are subject to change without notice.
Customers should verify actual device performance in their specific applications.

