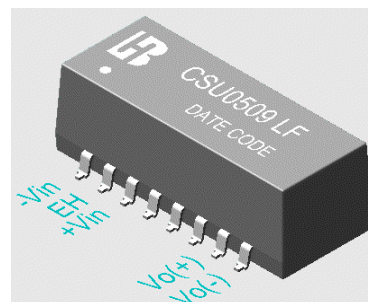


1. Features :

- 1.1. 16 Pin SMD Package
- 1.2. Low Ripple and Noise
- 1.3. Input / Output Isolation : 1000 Vdc
- 1.4. Net Weight : 3 g Typical
- 1.5. ROHS Converter certified By SGS

**2. Input Specification :**

- | | | |
|--------------------------|----------------------|---|
| 2.1. Input Voltage | : 4.5 ~ 5.5 Vdc | |
| 2.2. Max. Input Current | : 444 mA Max. | @ Vin = 5Vdc and Output at Full Load. |
| 2.3. Quiescent Current | : 22 mA Typical | @ Vin = 5Vdc and No Load. |
| 2.4. Input Filter | : Internal Capacitor | |
| 2.5. Switching Frequency | : 60 KHz Typ. | |
| 2.6. Input Efficiency | : 81 % Min. | @ Vin = 5Vdc and 100 % Load. (85 % Typical) |

3. Output Specification :

- | | | |
|------------------------------------|----------------------|---------------------------------------|
| 3.1. Output Voltage | : 9 Vdc | @ Vin = 5Vdc and Output at Full Load. |
| 3.2. Output Voltage Accuracy | : $\pm 5 \%$ | Vo = 8.55 ~ 9.45Vdc |
| 3.3. Output Current | : 200 mA | |
| 3.4. Ripple & Noise | : 80 mVp-p Max. | @ 20 MHz BW |
| 3.5. Line Regulation | : 1.3 % / 1.0 % Max. | See Note (1). |
| 3.6. Load Regulation | : 8 % | See Note (2). |
| 3.7. Output Short circuit duration | : 1 Second Max. | (Auto Recovery) |
| 3.8. Temperature Coefficient | : $\pm 0.02 \%$ / | |

Note :

- (1). Line Regulation : Set output load to full load, Then adjust input voltage from 4.5Vdc to 5.5Vdc (10% change), The output voltage difference must be within 13 % of the output at full load and nominal input.
- (2). Load Regulation : Set input voltage at 5.0Vdc, Then changing the load current from 20 % to 100 % Max. Load. The output voltage difference must be within 8 % of the output at full load and nominal input, Load Regulation

$$= (V_{max} - V_{min}) / V_{nom} * 100 \% \quad \square$$

4. General Specification :

- | | | |
|--------------------------------|--------------------------|---|
| 4.1. Isolation Voltage | : 1000 Vdc | Test duration 60 Seconds / 0.5 mA |
| 4.2. Isolation Resistance | : 1000 M Ω Min. | @ 500 Vdc |
| 4.3. Operating Temperature | : -40 ~ +85 | @ Ambient Temperature with Natural convention |
| 4.4. Operating Temperature (2) | : -40 ~ +95 | @ Case Surface Temperature |
| 4.5. Storage Temperature | : -55 ~ +125 | |
| 4.6. Humidity | : Up to 90 % | |
| 4.7. Cooling | : Free Air convection | |
| 4.8. Case Type | : Non-Conductive Plastic | |



The drawing shows the mechanical specifications for the CSU0509 LF component. The top view includes dimensions for the package width (25.50 mm / 1.00 in), pin pitch (2.54 mm / 0.10 in), and pin width (0.50 mm / 0.02 in). The side view shows the package height (8.65 mm / 0.34 in) and the mounting tab height (6.70 mm / 0.26 in). The detail view shows the mounting tab dimensions (0.90 mm / 0.04 in) and the mounting angle (C° - 8°).

Pin	1000 Vdc - Single		Pin
1	-Vin	NC	16
2	NC		15
3	+Vin		14
4	NC		13
5			12
6			11
7			10
8	Vo(+)		9
	Vo(-)		

[illegible]

Tolerance : $0.xx \pm 0.25(0.xx \pm 0.01)$

Case Surface Temperature (°C)	Output Power (%)
-40	100
95	100
150	0

Output Load (mA)	Efficiency (%)
0.0	0
20.0	65
40.0	78
60.0	82
80.0	84
100.0	85
120.0	85
140.0	85
160.0	85
180.0	85
200.0	84