



## HIGH CURRENT 2LP Low Profile Power Inductors

### Description

- Compact footprint for high density, high current/low voltage applications
- Foil technology that adds higher reliability factor over the traditional magnet wire used for higher frequency circuit designs
- Frequency Range up to 1MHz

### Applications

- Next generation microprocessors
- Energy storage applications
- DC-DC converters
- Computers

### Environmental Data

- Storage temperature range: -40C to +125C
- Operating ambient temperature range: -40C to +85C (range is application specific).
- Infrared reflow temperature: +260C for 10 seconds maximum



### Packaging

- Supplied in tape and reel packaging, 44mm width, 130 parts per 13" reel
- 45 parts per tray, bulk packaging also available

| Part Number | Rated Inductance $\mu\text{H}$ | OCL (1) $\mu\text{H} \pm 20\%$ | I <sub>rms</sub> (2) Amperes (Typ.) | I <sub>sat</sub> (3) Amperes (Typ.) | DCR (4) Ohms (Max.) | Volts (5) $\mu\text{Sec}$ |
|-------------|--------------------------------|--------------------------------|-------------------------------------|-------------------------------------|---------------------|---------------------------|
| HC2LP-R47   | .47                            | .52                            | 52.9                                | 63.75                               | .0006               | 6.87                      |
| HC2LP-R68   | .68                            | .63                            | 52.9                                | 50.00                               | .0006               | 6.87                      |
| HC2LP-1R0   | 1.0                            | 1.15                           | 33.0                                | 42.50                               | .0013               | 10.31                     |
| HC2LP-2R2   | 2.2                            | 2.00                           | 24.3                                | 31.90                               | .0023               | 13.75                     |
| HC2LP-4R7   | 4.7                            | 4.55                           | 17.0                                | 21.25                               | .0046               | 20.62                     |
| HC2LP-6R0   | 6.0                            | 6.00                           | 17.0                                | 16.50                               | .0046               | 20.62                     |

1) Open Circuit Inductance Test Parameters: 300kHz, 0.250 Vrms, 0.0 Adc  
 2) DC current for an approximate temperature change of 40°C without core loss. Derating is necessary for AC currents.  
 PCB layout, trace thickness and width, air-flow and proximity of other heat generating components will affect the temperature rise.  
 It is recommended that the temperature of the part not exceed 125°C under

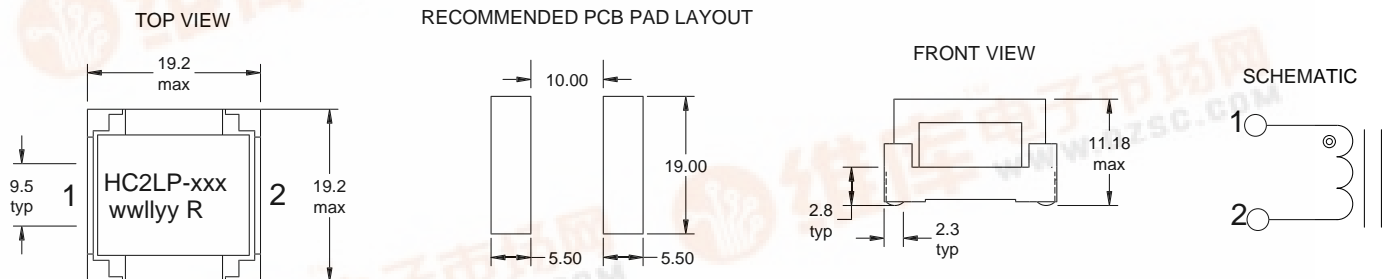
worst case operating conditions verified in the end application.

3) Peak current for approximately 30% roll-off

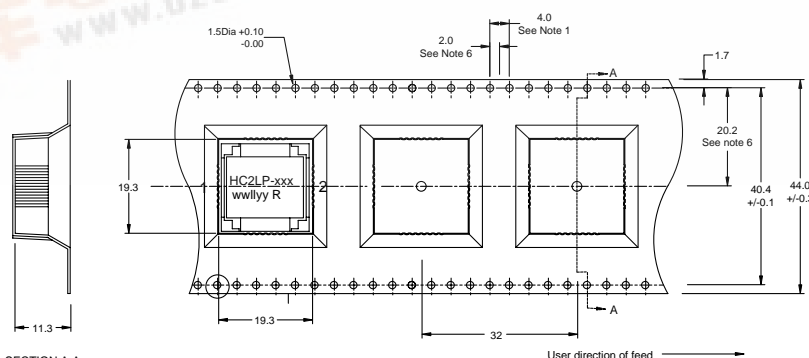
4) Values @ 20°C

5) Applied Volt-Time product (V- $\mu\text{s}$ ) across the inductor. This value represents the applied V- $\mu\text{s}$  at 300kHz necessary to generate a core loss equal to 10% of the total losses for 40°C temperature rise.

### Mechanical Diagrams



### Packaging Information



Parts packaged on 13" Diameter reel, 130 parts per reel

