

WE-EHPI

Energy Harvesting Power Inductor



Optimized for
LTC3108/LTC3109
and other

Characteristics

- Low profile: 4 mm
- Small footprint 6 x 6 mm
- Very low secondary R_{DC}
- Different turn ratios available
- Separated welding/soldering pad for a high reliable component
- Optimized, high reliable winding style

Applications

- Wireless fire, alarm, gas and metering remote sensors driven by environmental energies based on energy harvesting voltage transformers like LTC3108/LTC3109
- Sensors with predictive battery replacements in applications which are difficult to access
- Energy self-sufficient supply using subsequent installed sensors for energy harvesting

QR-Code

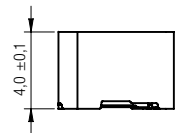
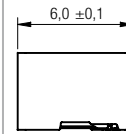
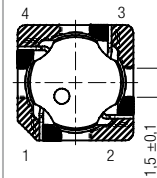


Electrical properties

Order Code	$L_1 \pm 20\%$ (μH)	$L_2 \pm 20\%$ (μH)	n	I_{R1} (A)	I_{satt} (A)	R_{DC1} (Ω)	R_{DC2} (Ω)	Qty.
744 885 400 70	7.5	75000	1:100	1.9	1.3	0.085	205	1000
744 885 401 20	13.0	33000	1:50	1.7	1.0	0.090	135	
744 885 402 50	25.0	10000	1:20	1.5	0.7	0.200	42	

I_{R1} : rated current of 40K over the ambient temperature by energizing L_1 ,
 I_{satt} : inductance loss of 10% typ. by energizing L_2

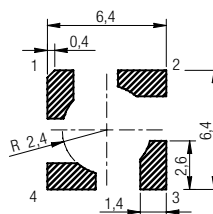
Dimensions (in mm)



Schematic



Land pattern (in mm)



Note

Recently ICs are able to operate in the milliwatt range. The power supply can be developed by using new methods. Their batteries can be charged or even replaced by development of energy harvesting applications. Such as energy harvesting, which is based on the Peltier effect, is useful for temperature difference. For example LTC3108.

