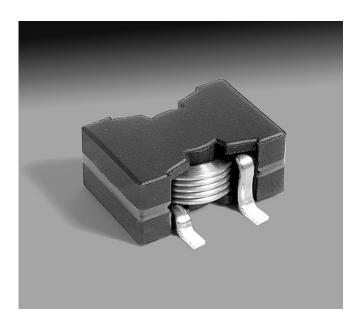
# Flat Wire Power Inductor For Maxim MAX5051 Controller IC



Designed for Maxim's MAX5051 Power Supply Controller, the A9860-B offers exceptional electrical performance.

Flat wire windings offers extremely low DC resistance and high saturation current ratings. The flat core provides excellent heat dissipation.

Core material Ferrite

Terminations Tin-silver over copper

Weight 11.4 g

Ambient temperature  $-40^{\circ}$ C to  $+85^{\circ}$ C with  $(40^{\circ}$ C rise) Irms current. Maximum part temperature  $+125^{\circ}$ C (ambient + temp rise). Derating. Storage temperature Component:  $-40^{\circ}$ C to  $+125^{\circ}$ C.

Tape and reel packaging: -40°C to +80°C

Resistance to soldering heat Max three 40 second reflows at +260°C, parts cooled to room temperature between cycles

Moisture Sensitivity Level (MSL) 1 (unlimited floor life at  $<30^{\circ}$ C / 85% relative humidity)

Failures in Time (FIT) / Mean Time Between Failures (MTBF)

38 per billion hours / 26,315,789 hours, calculated per Telcordia SR-332 **Packaging** 200/13" reel; Plastic tape: 44 mm wide, 0.4 mm thick, 32 mm pocket spacing, 9.6 mm pocket depth

**PCB washing** Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See Doc787\_PCB\_Washing.pdf.

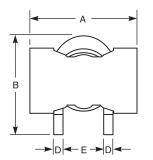
Part	L @ 0 A <sup>2</sup>	L @ 15.0 A <sup>2</sup>	DCR max	SRF typ <sup>3</sup>	Isat <sup>4</sup>	Irms⁵	
number¹	±20% (μΗ)	±20% (µH)	(mOhm)	(MHz)	(A)	(A)	
A9860-B_	2.70	2.70	3.0	63.0	20.0	15.0	

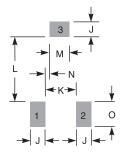
1. Please specify termination and packaging codes:

#### A9860-BD

Packaging: D = 13" machine-ready reel EIA-481 embossed plastic tape (200 per full reel).

- B = Less than full reel In tape, but not machine-ready. To have a leader and trailer added (\$25 charge), use code letter D instead.
- 2. Inductance measured at 100 kHz, 0.1 Vrms, 0 Adc using a Coilcraft SMD-D fixture in an Agilent/HP 4284A impedance analyzer.





Recommended Land Pattern



- 3. SRF measured using an Agilent/HP 8753D network analyzer and a Coilcraft SMD-D test fixture.
- 4. DC current at which the inductance drops 10% (typ) from its value without current. Click for temperature derating information.
- Current that causes a 40°C rise from 25°C ambient. This information is for reference only and does not represent absolute maximum ratings. Click for temperature derating information.
- 6. Electrical specifications at 25°C.

Refer to Doc 362 "Soldering Surface Mount Components" before soldering.

A max	c Bn	nax (	C max	D	E	F	G
0.91	0.	85	0.39	0.08	0.30	0.10	0.57
23,0	21	,5	10,0	2,0	7,5	2,5	14,5
н	1	J	K	L	М	N	1 0
0.098	0.08	0.129	0.25	0.486	0.16	8 0.0	39 0.216
2,5	2,0	3,27	6,23	12,35	4,27	7 0,9	98 5,48



Terminal 3 is for mounting stability only. Do not connect to ground or other circuits.



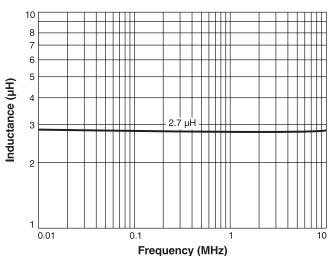
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# Flat Wire Power Inductor for Maxim MAX5051

### **Typical L vs Frequency**



## **Typical L vs Current**

