

# LEADED SUPER POWER INDUCTORS

## Series GP



### FEATURES

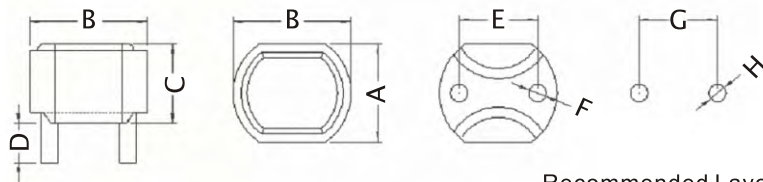
- ◆ No air-space, Magnetic powder is full filled inside.
- ◆ Low DCR, Lower Loss, Low profile package with Large Current Design.
- ◆ Magnetic shielded construction for high density board assembly.
- ◆ Good DC current characteristics in high frequency and high temperature.
- ◆ Large energy storage capability.
- ◆ Flexibility for Customer Specification Design

### PRODUCT IDENTIFICATION

GP   12   X   09   P   M   390N  
 a      b      c      d      e      f      g

- a : Type of products - LEADED SUPPER POWER INDUCTORS  
 b : Dimension(mm) - 12= 10.2X12.3  
 c : Materials - NO USE  
 d : Thickness(mm) - 10 : 10.0  
 e : Packing - PCS / REEL - P = 1,000  
 f : Tolerance - M : ±20%  
 g : Inductance - 170N = 0.17 μH , 900N = 0.9 μH

### SHAPES & DIMENSIONS



Recommended Layout

Part Number	A	B	C	D	E	F	G	H
GP12X10	10.2 ± 0.5	12.3 ± 0.5	10.0 max.	3.5 ± 0.5	8.0 ± 0.5	1.4 ± 0.2	8.0 typ.	2.0 max.

### ELECTRICAL CHARACTERISTICS

Part Number	L0(μH)	Tolerance(%)	I <sub>rms</sub> (A) max.	I <sub>sat</sub> (A) max.	RDC mΩ @25°C typ.	RDC mΩ @25°C max.
GP12X10AM220N	0.22	20	38	56	0.50	0.60
GP12X10AM330N	0.33	20	33	48	0.70	0.80
GP12X10AM390N	0.39	20	33	45	0.70	0.80
GP12X10AM470N	0.47	20	30	40	0.85	1.00
GP12X10AM560N	0.56	20	30	40	0.85	1.00
GP12X10AM680N	0.68	20	30	40	0.85	1.00
GP12X10AM800N	0.8	20	26	36	1.25	1.45
GP12X10AM1U	1	20	24	32	1.75	2.00
GP12X10AM1U2	1.2	20	24	30	1.75	2.00
GP12X10AM1U5	1.5	20	22	30	3.00	3.50
GP12X10AM2U2	2.2	20	20	25	3.80	4.60
GP12X10AM2U8	2.8	20	18	20	4.50	5.00
GP12X10AM3U3	3.3	20	14	16	6.40	7.20
GP12X10AM4U7	4.7	20	12	15	8.30	9.80

All test Data is referenced to 25°C ambient  
 Typical Saturation DC Current would cause Lo to drop approximately 20%  
 Typical Heat Rating DC Current would cause an approximately ΔT of 40°C  
 Recommended Soldering Profile:  
 Pre-heating: 150°C, 1 min Solder Temperature: 230°C, 4±1 sec