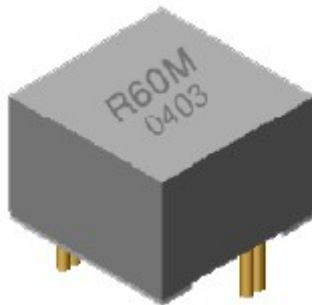


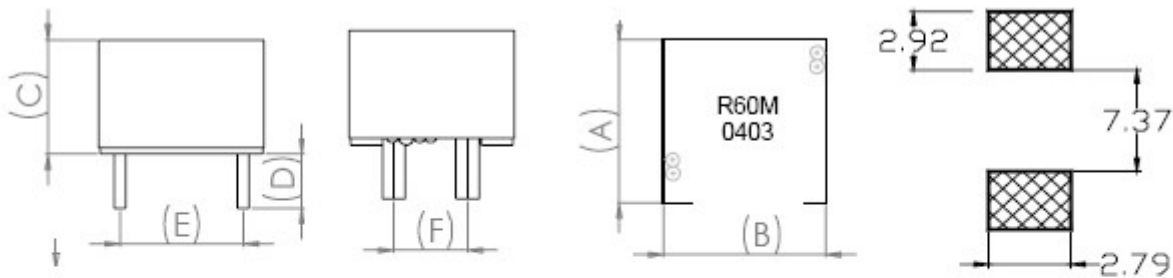
## KL DIP POWER CHOKE



### Features

- Magnetic shielded construction for high density board assembly
- High performance excellent DC current characteristics
- Large energy storage capacity
- Up to 40 amps continuous
- Custom designs available

### Dimension



Unit: mm

TYPE	A	B	C	D	E	F
KL1209	11.5MAX	11.5MAX	8.6MAX	3.4±0.5	8.5±0.5	3.5±0.5
KL1210	11.5MAX	11.5MAX	10MAX	3.4±0.5	8.5±0.5	3.5±0.5
KL1409	14.0MAX	14.0MAX	8.5MAX	3.4±0.5	11.5±0.5	6.5±0.5
KL1410	14.0MAX	14.0MAX	10MAX	3.4±0.5	11.5±0.5	6.5±0.5



## Product Identification

**KL 1410 M B R60**

(1) (2) (3) (4) (5)

(1) Type: DIP Power Choke

(2) Dimensions(mm): 1209=11.5mm×11.5mm×8.6mm, 1210=11.5mm×11.5mm×10mm.

1409=14mm×14mm×8.5mm, 1410=14mm×14mm×10mm.

(3) Tolerance: M=20%, L=15%, K=10%.

(4) Packaging style: B=Bulk

(5) Inductance: R60=0.6uH, 1R0=1.0uH, 100=10uH.

## Electrical Characteristics

### ● 1209 TYPE

Part Number	L (uH)	Tole. (%)	Test Frequency (KHz)	RDC (mΩ) Max	IDC (A) Min
KL1209□BR25	0.25	20%	100	0.62	40
KL1209□BR40	0.4	20%	100	0.75	40
KL1209□BR50	0.5	20%	100	1.50	40

### ● 1210 TYPE

Part Number	L (uH)	Tole. (%)	Test Frequency (KHz)	RDC (mΩ) Max	IDC (A) Min
KL1210□BR47	0.47	20%	100	1.50	35
KL1210□BR50	0.5	20%	100	1.30	35
KL1210□B1R2	1.2	20%	100	3.50	25
KL1210□B2R2	2.2	20%	100	4.00	20

### ● 1409 TYPE

Part Number	L (uH)	Tole. (%)	Test Frequency (KHz)	RDC (mΩ) Max	IDC (A) Min
KL1409□BR60	0.6	20%	100	1	30
KL1409□B1R0	1.0	20%	100	2	30
KL1409□B1R2	1.2	20%	100	2	30
KL1409□B1R5	1.5	20%	100	2	25
KL1409□B2R2	2.2	20%	100	3	20
KL1409□B3R3	3.3	20%	100	4.5	20



## Electrical Characteristics

### ● 1410 TYPE

Part Number	L (uH)	Tole. (%)	Test Frequency (KHz)	RDC (mΩ) Max	IDC (A) Min
KL1410□BR30	0.3	20%	100	0.8	60
KL1410□BR50	0.5	20%	100	1	40
KL1410□BR60	0.6	20%	100	1	40
KL1410□BR90	0.9	20%	100	1.8	30
KL1410□B1R0	1.0	20%	100	2	30
KL1410□B1R2	1.2	20%	100	2	30
KL1410□B1R5	1.5	20%	100	2.2	25
KL1410□B2R2	2.2	20%	100	3	20
KL1410□B3R3	3.3	20%	100	3	15
KL1410□B4R7	4.7	20%	100	5	15

Note:\*AT 25MHZ      \*\*AT7.9MHZ

When ordering please specify tolerance and packaging code.

Ex : PMC129- R60M- S Tolerance: M ± 20% L ± 15% K ± 10% Packaging: Clear Tape and Reel( Stadar)

L Q :HP4287A                      SRF :HP8753D/E4991A                      RDC:Digital Multimeter SC-7401

Operating Temperature °C Range-40 to+125 °C

## Reliability Of Ferrite Wire Wound Power Inductor

### 1-1Mechanical Performance

No	Item	Specification	Test Method
1-1-1	Vibration	Appearance: No damage L change: within±10% Q change: within±30% RDC: within specification	Test device shall be soldered on the substrate Oscillation Frequency: 10 to 55 to 10Hz for 1min Amplitude: 1.5mm Time: 2hrs for each axis (X, Y & Z), total 6hrs
1-1-2	Resistance to Soldering Heat	Appearance: No Damage	Pre-heating:150°C, 1Min. Solder Composition: Sn/Ag/Cu= 95.6/3.0/0.5 Solder Temperature: 260±5°C Immersion Time: 4±1Sec.
1-1-3	Solderability	The electrodes shall be at least 90% covered with new solder coating	Pre-heating: 150°C, 1min Solder Composition: Sn/Ag/Cu= 95.6/3.0/0.5 Solder Temperature: 250±5°C Immersion Time: 4±1sec



## 1-2 Environmental Performance

No	Item	Specification	Test Method															
1-2-1	Temperature Shock	Appearance: No damage L change: within±10% Q change: within±30% RDC: within specification	10 cycles (Air to Air) 1 cycles shall consist of: 30 minutes exposure to -55 °C 30 minutes exposure to 125 °C 15 seconds maximum transition between temperatures															
1-2-2	Temperature Cycle		One cycle: <table border="1"> <thead> <tr> <th>Step</th> <th>Temperature (°C)</th> <th>Time (min)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>-25±3</td> <td>30</td> </tr> <tr> <td>2</td> <td>25±2</td> <td>3</td> </tr> <tr> <td>3</td> <td>85±3</td> <td>30</td> </tr> <tr> <td>4</td> <td>25±2</td> <td>3</td> </tr> </tbody> </table>	Step	Temperature (°C)	Time (min)	1	-25±3	30	2	25±2	3	3	85±3	30	4	25±2	3
Step	Temperature (°C)	Time (min)																
1	-25±3	30																
2	25±2	3																
3	85±3	30																
4	25±2	3																
			Total: 100cycles Measured after exposure in the room condition for 24hrs															
1-2-3	Humidity Resistance		Temperature: 40±2°C Relative Humidity: 90 ~ 95% Time: 1000hrs Measured after exposure in the room condition for 24hrs															
1-2-4	Heat Temperature Resistance		Temperature: 85±3°C Relative Humidity: 20% Applied Current: Rated Current Time: 1000hrs Measured after exposure in the room condition for 24hrs															
1-2-5	Low Temperature Resistance		Temperature: -25±3°C Relative Humidity: 0% Time: 1000hrs Measured after exposure in the room condition for 24hrs															

\* Storage Temperature :25±3°C ;<80%RH