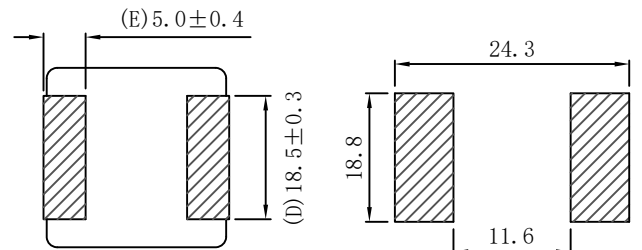
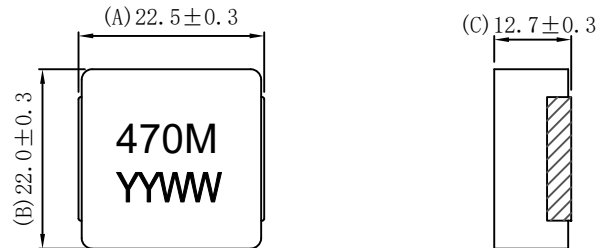
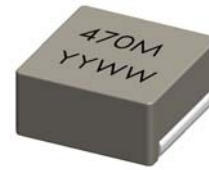


## FEATURES

- RoHS compliant, UL94V-0
- Small size (22.80\*22.30mm Max), low profile (Height: 13.0mm Max)
- Inductance range from 0.47uH to 100.0uH
- Surface mount design
- Magnetic shield construction
- Ultra low buzz noise due to composite construction
- Handle transient current spikes without saturation
- Excellent temperature stability for inductance and saturation
- Tape & reel packing
- Solder profile acc. J-STD-020D

## APPLICATIONS

- Low profile, high current power supplies
- DC/DC converters
- Battery powered devices
- PDA/notebook/desktop/server applications



Suggested Pad Layout  
Dimensions are in mm



| Part number   | Inductance<br>( $\mu\text{H} \pm 20\%$ ) | DCR (m $\Omega$ ) @25°C |       | Irms<br>(A) | Isat<br>(A) |
|---------------|--|-------------------------|-------|-------------|-------------|
|               |  | TYP.                    | MAX.  |             |             |
| MHA2213SGR47M | 0.47                                     | 0.56                    | 0.67  | 80.0        | 100.0       |
| MHA2213SG1R0M | 1.00                                     | 0.82                    | 0.89  | 69.0        | 71.0        |
| MHA2213SG1R5M | 1.50                                     | 1.00                    | 1.15  | 50.0        | 50.0        |
| MHA2213SG2R2M | 2.20                                     | 1.20                    | 1.25  | 48.0        | 48.0        |
| MHA2213SG3R3M | 3.30                                     | 1.63                    | 1.77  | 41.0        | 41.0        |
| MHA2213SG4R7M | 4.70                                     | 1.69                    | 1.84  | 37.0        | 37.0        |
| MHA2213SG6R8M | 6.80                                     | 2.84                    | 3.09  | 36.0        | 36.0        |
| MHA2213SG100M | 10.0                                     | 4.04                    | 4.14  | 28.0        | 28.0        |
| MHA2213SG150M | 15.0                                     | 5.62                    | 6.11  | 23.5        | 24.0        |
| MHA2213SG220M | 22.0                                     | 10.60                   | 10.80 | 17.5        | 16.0        |
| MHA2213SG330M | 33.0                                     | 15.10                   | 15.40 | 15.5        | 10.5        |
| MHA2213SG470M | 47.0                                     | 17.30                   | 17.70 | 13.5        | 10.0        |
| MHA2213SG680M | 68.0                                     | 26.20                   | 29.50 | 12.0        | 9.5         |
| MHA2213SG750M | 75.0                                     | 29.76                   | 32.35 | 11.0        | 9.0         |
| MHA2213SG820M | 82.0                                     | 31.46                   | 34.20 | 10.2        | 9.0         |
| MHA2213SG101M | 100.0                                    | 36.25                   | 39.40 | 9.1         | 7.0         |

## ABSOLUTE MAXIMUM RATINGS

|   |                 |
|---|-----------------|
| Operating temperature rang<br>(Including coil' self temperature rise) | -55°C to +125°C |
| Storage temperature rang  | -55°C to +125°C |

## SOLDERING INFORMATION

|                         |       |
|-------------------------|-------|
| Peak reflow temperature | 250°C |
| Pin finish              | tin   |

## PACKAGING INFORMATION

|             |                |
|-------------|----------------|
| Tape & Reel | 50pcs per reel |
| Weight      | 37.5g/pcs      |

## Notes

1. Electrical specification at 25°C.
2. Inductance tested at 100 kHz, 0.25Vrms.
3. Irms is the current that caused a approximate 40°C temperature rise from 25°C ambient.
4. Isat is the DC current at which inductance drop approximately 20% from its value without current.
5. The part temperature (ambient + temp. rise) should not exceed 125°C under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.