

## NRSA Series

### SMD Power Inductors For Automotive Size 3012



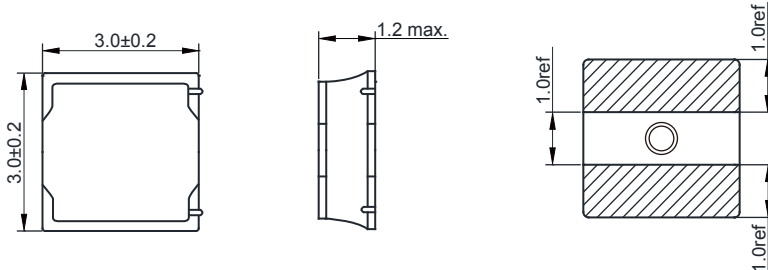
#### FEATURES

- Magnetic shield type wound inductor for power circuits using a ferrite magnetic material
- High magnetic shield construction and compatible with high-density mounting.
- Larger current and lower Rdc were achieved by optimizing the ferrite core figure.
- Operating temperature: -55 to +125°C (including self-temperature rise)
- High reliability -Reliability test meet AEC-Q200
- Quantity: 2000pcs

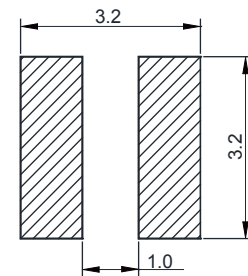
#### APPLICATION

- Car navigation, car stereo and car accessories only

#### Dimensions: [mm]



#### Land Pattern: [mm]



#### Electrical Properties:

| Part No       | L @0.1V/1MHz<br>(μH) | Tolerance | I <sub>SAT</sub> Typ.<br>(A) | I <sub>R</sub> Typ.<br>(A) | R <sub>DC</sub> ±20%<br>(mΩ) |
|---------------|----------------------|-----------|------------------------------|----------------------------|------------------------------|
| NRSA3012-1R0N | 1.0                  | ±30%      | 2.15                         | 2.00                       | 42                           |
| NRSA3012-1R5N | 1.5                  | ±30%      | 1.70                         | 1.85                       | 56                           |
| NRSA3012-2R2M | 2.2                  | ±20%      | 1.50                         | 1.70                       | 80                           |
| NRSA3012-3R3M | 3.3                  | ±20%      | 1.20                         | 1.55                       | 100                          |
| NRSA3012-4R7M | 4.7                  | ±20%      | 1.05                         | 1.30                       | 130                          |
| NRSA3012-6R8M | 6.8                  | ±20%      | 0.90                         | 1.05                       | 180                          |
| NRSA3012-100M | 10                   | ±20%      | 0.76                         | 0.89                       | 245                          |
| NRSA3012-150M | 15                   | ±20%      | 0.62                         | 0.74                       | 386                          |
| NRSA3012-220M | 22                   | ±20%      | 0.49                         | 0.61                       | 580                          |

I<sub>R</sub> will cause the coil temperature rise approximately Δt40 °C

I<sub>SAT</sub> will cause L to drop approximately 30% max.

## Typical Electrical Characteristics:

