

# SMD Power Inductor

## Fixed Inductor for Surface Mounting

## SPE3012 Series

### Construction

- SMD Magnetic-resin shielded type



### Features

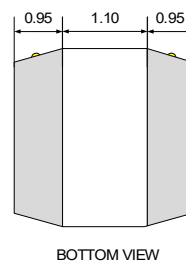
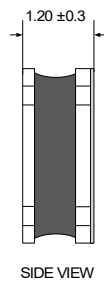
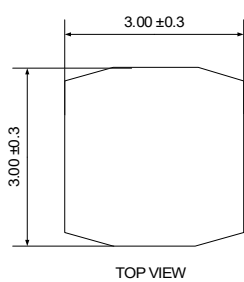
- Qualified to AEC-Q200
- Operating temperature -50 ~ +155C (Including self temperature)
- Solder reflow temperature 260°C peak
- Suitable for lead-free reflow soldering
- Available on tape and reel for automatic insertion



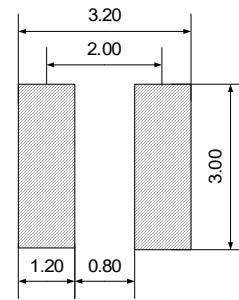
### Applications

- Automotive / PDA / Notebook systems
- DC/DC converters
- Portable gaming devices, personal navigation systems, personal multimedia devices

### Dimensions (Unit:mm)



### Recommended Land Pattern (Unit:mm)



### Electrical Characteristics

| Ordering code | Inductance(uH) | DCR(mΩ,±30%) | Isat*1(A,TYP) | Marking |
|---------------|----------------|--------------|---------------|---------|
| SPE3012-1R5N  | 1.50±30%       | 62.0         | 1.60          | -       |
| SPE3012-4R7M  | 4.70±30%       | 130.0        | 1.10          | -       |
| SPE3012-100M  | 10.0±20%       | 285.0        | 0.76          | -       |
| SPE3012-150M  | 15.0±20%       | 440.0        | 0.60          | -       |
| SPE3012-470M  | 47.0±20%       | 1.30Ω        | 0.30          | -       |

#### ※Test Equipment

\*Inductance : Agilent 4285A (100kHz, 1.0V)

\*DCR Meter : ABM3245 (20mΩ~2MΩ)

\*Bias Current : Agilent 4285A + Agilent 42841A

\*Specifications subject to change without notice. Please check our website for latest information.

#### \*Notes

\*1.Isat : DC current (A) that will cause L0 to drop approximately 30%

\*2.Irms : DC current (A) that will cause an approximate ΔT of 40°C

Revised 01/02/25