

# SPL3312 Surface Mount Power Inductor



## APPLICATIONS

- ◇ DC/DC converters
- ◇ Computers
- ◇ Telecommunications Equipment
- ◇ Filters
- ◇ LCD Display

## CHARACTERISTICS

Flat Top for surface mounting.  
High Current SMD, up to 2.4 ADC.

**FLAMABILITY:** To UL94V0.

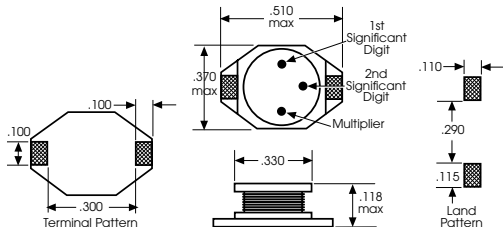
**TEMPERATURE RANGE:** -40°C to 85°C.

**SOLDERABILITY:** Excellent for IR soldering.

**PACKAGING:** Tape and Reel only.

## DIMENSIONS IN MM

| UNIT | A Max | B Max | C Max | D     | E     |
|------|-------|-------|-------|-------|-------|
| In   | 0.350 | 0.240 | 0.197 | 0.230 | 0.180 |
| mm   | 8.89  | 6.10  | 5.00  | 5.84  | 4.57  |



## NOTES:

- (1) Inductance tested at 100kHz, 0.10VRMS.
- (2) Rated Current based on 10% drop in initial inductance.
- (3) DCR measured on milliohm meter.

## CHARACTERISTICS

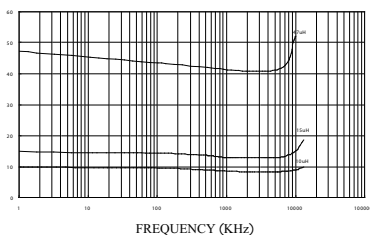
Inductance tested at 100 kHz, 0.1 Vrms.

Inductance drop = 10% typ. at Isat.

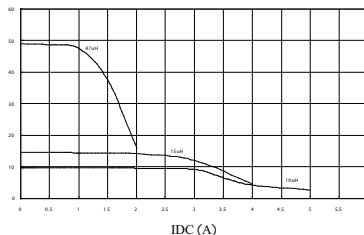
T = 40°C rise typ at Irms.

Operating temperature range -40°C to +85°C

INDUCTANCE VS. FREQUENCY CHARACTERISTICS



INDUCTANCE VS. IDC CHARACTERISTICS



| Part Number  | Ind. (µH) | Tol. (±%) | DCR (Ω) Max | SRF (MHz) Typ | Isat (A) | Irms (A) |
|--------------|-----------|-----------|-------------|---------------|----------|----------|
| SPL3312-100M | 10        | 20        | 35          | 0.09          | 2.4      | 2.0      |
| SPL3312-150M | 15        | 20        | 33          | 0.12          | 2.0      | 1.5      |
| SPL3312-220M | 22        | 20        | 25          | 0.19          | 1.6      | 1.3      |
| SPL3312-330M | 33        | 20        | 19          | 0.25          | 1.4      | 1.1      |
| SPL3312-470M | 47        | 20        | 14          | 0.32          | 1.0      | 0.8      |
| SPL3312-680M | 68        | 20        | 12          | 0.55          | 0.9      | 0.7      |
| SPL3312-101M | 100       | 20        | 10          | 0.70          | 0.7      | 0.6      |
| SPL3312-151M | 150       | 20        | 8           | 1.00          | 0.6      | 0.5      |
| SPL3312-221M | 220       | 20        | 6           | 1.60          | 0.5      | 0.4      |
| SPL3312-331M | 330       | 20        | 5           | 2.20          | 0.4      | 0.3      |
| SPL3312-471M | 470       | 20        | 4           | 3.30          | 0.3      | 0.2      |
| SPL3312-681M | 680       | 20        | 3           | 4.40          | 0.2      | 0.1      |
| SPL3312-102M | 1000      | 20        | 2.5         | 7.00          | 0.1      | 0.0      |