

SMD POWER INDUCTORS (ED-XXX SERIES)

trio



ED
01

● PART NUMBERING

ED - □□□ □ □□ □ □□
(1) (2) (3) (4) (5) (6)

- (1) Series
- (2) Inductance
- (3) Tolerance
- (4) Dimension
- (5) Material
- (6) Internal Serial No.

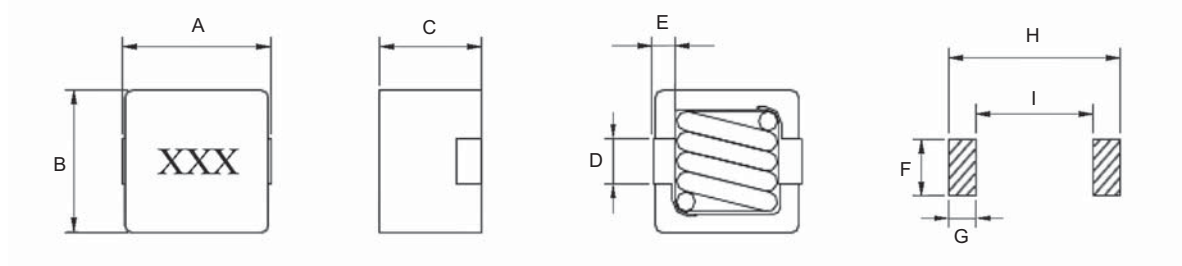
● FEATURES

- Magnetically shielded construction.
- Large current.
- Excellent saturation characteristics.

● APPLICATIONS

- DC/DC converters
- VRM
- Motor electronics
- Single and poly phase buck converter

● CONFIGURATIONS & DIMENSIONS



Unit : mm

| SERIES | A | B | C | D | E | F | G | H | I |
|--------|-----------|-----------|-----------|---------|---------|---------|---------|---------|---------|
| ED-01W | 8.40±0.3 | 7.9±0.3 | 7.0±0.4 | 2.3±0.2 | 1.5±0.2 | 3.0Typ. | 2.3Typ. | 9.2Typ. | 4.4Typ. |
| ED-03W | 8.85±0.5 | 8.2±0.5 | 8.5±0.5 | 3.2±0.3 | 2.3±0.3 | 5.0Typ. | 3.0Typ. | 9.6Typ. | 3.8Typ. |
| ED-04W | 10.9±0.4 | 10.0±0.4 | 9.3±0.4 | 3.0±0.2 | 1.6±0.2 | 3.6Typ. | 2.3Typ. | | 6.9Typ. |
| ED-02W | 12.3 MAX. | 11.7 Max. | 10.0 Max. | 3.5±0.2 | 1.8±0.2 | 5.4Typ. | 2.9Typ. | | 8.0Typ. |

- For packaging information, please refer to page P.97.

● ELECTRICAL CHARACTERISTICS

| New Part No. | Old Part No. | L (μ H) | FREQ. (KHz/1V) | DCR (Ω , Max.) | Isat (A, Max.) | Irms (A, Max.) |
|--------------|---------------|-----------------|-------------------|---------------------------|-------------------|-------------------|
| ED-47B□01W□□ | SBIG0806-R47□ | 0.47 | 100 | 0.0038 | 20.00 | 17.00 |
| ED-68B□01W□□ | SBIG0806-R68□ | 0.68 | 100 | 0.0049 | 20.00 | 16.00 |
| ED-10A□01W□□ | SBIG0806-1R0□ | 1.00 | 100 | 0.0042 | 24.00 | 17.00 |
| ED-22A□01W□□ | SBIG0806-2R2□ | 2.20 | 100 | 0.0055 | 10.00 | 10.00 |
| ED-33A□01W□□ | SBIG0806-3R3□ | 3.30 | 100 | 0.0082 | 8.50 | 14.00 |
| ED-68A□01W□□ | SBIG0806-6R8□ | 6.80 | 100 | 0.0235 | 4.00 | 6.00 |
| ED-47B□03W□□ | SBIG0808-R47□ | 0.47 | 100 | 0.0020 | 20.00 | 18.00 |
| ED-68B□03W□□ | SBIG0808-R68□ | 0.68 | 100 | 0.0031 | 24.00 | 20.00 |
| ED-22A□04W□□ | SBIG1009-2R2□ | 2.20 | 100 | 0.0037 | 22.00 | 16.50 |
| ED-82B□02W□□ | SBIG1109-R82□ | 0.82 | 100 | 0.0024 | 38.00 | 30.00 |
| ED-47A□02W□□ | SBIG1109-4R7□ | 4.70 | 100 | 0.0100 | 16.00 | 11.50 |
| ED-100□02W□□ | SBIG1109-100□ | 10.00 | 100 | 0.0205 | 10.00 | 9.00 |
| ED-150□02W□□ | SBIG1109-150□ | 15.00 | 100 | 0.0200 | 4.50 | 8.00 |
| ED-220□02W□□ | SBIG1109-220□ | 22.00 | 100 | 0.0420 | 7.00 | 5.70 |
| ED-330□02W□□ | SBIG1109-330□ | 33.00 | 100 | 0.0605 | 6.00 | 5.00 |
| ED-470□02W□□ | SBIG1109-470□ | 47.00 | 100 | 0.0895 | 5.00 | 4.00 |

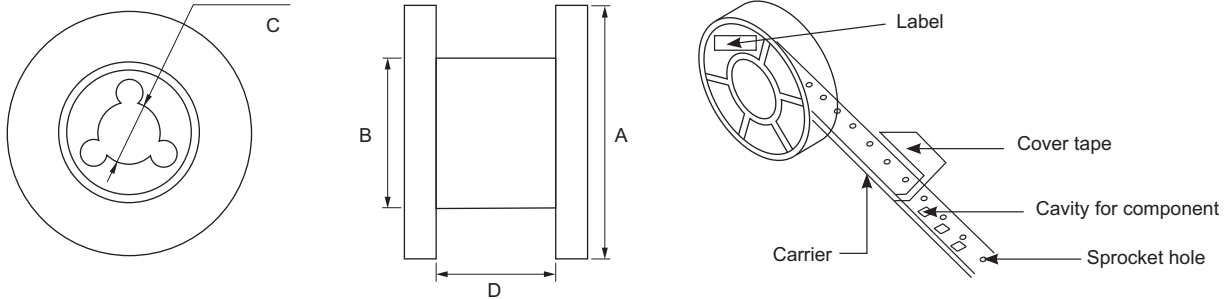
- Tested at 25°C.
- Temperature rise: 40°C Typ. at Irms
- Inductance drop: 30% Typ. at Isat
- Operating temperature: -55°C to +125°C
- Storage temperature: -40°C to +105°C

ED
02

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● PACKAGING INFORMATION

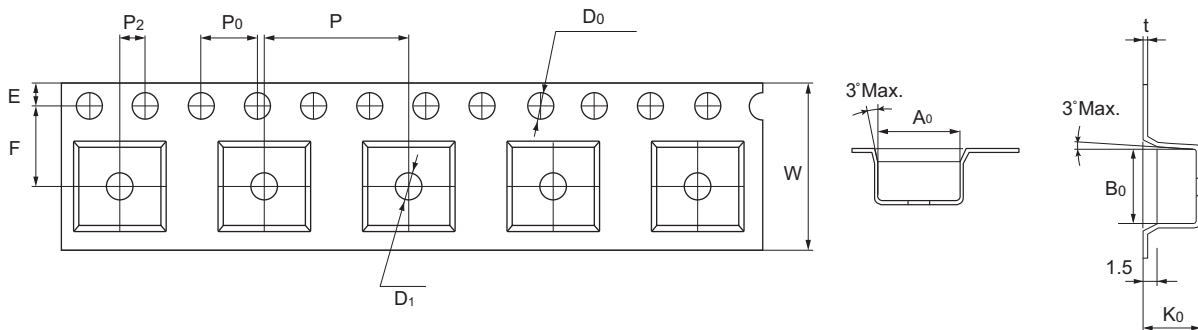


ED
03

● REEL Dimensions

Unit : mm

| SERIES | A | B | C | D | PCS/REEL Ø330mm |
|--------|-----|----------|----------|----|--------------------|
| ED-01W | 330 | 75.0±2.0 | 13.5±0.5 | 25 | 500 |
| ED-03W | 330 | 75.0±2.0 | 13.5±0.5 | 25 | 500 |
| ED-04W | 330 | 75.0±2.0 | 13.5±0.5 | 25 | 500 |
| ED-02W | 330 | 75.0±2.0 | 13.5±0.5 | 25 | 500 |



● TAPE Dimensions

Unit : mm

| SERIES | W | A ₀ | B ₀ | K ₀ | P | E | F | D ₀ /D ₁ | P ₀ | P ₂ | t |
|--------|----------------|----------------|----------------|----------------|------------|-----------|-----------|--------------------------------|----------------|----------------|----------|
| ED-01W | 24.00±0.35 | 8.00±0.15 | 9.00±0.15 | 7.05±0.15 | 16.00±0.25 | 1.75±0.15 | 11.5±0.15 | 1.5+0.15/-0.0 | 4.0±0.15 | 2.0±0.15 | 0.4±0.15 |
| ED-03W | 24.00±0.20 | 8.25±0.10 | 9.15±0.10 | 7.70±0.10 | 16.00±0.20 | 1.75±0.10 | 11.5±0.10 | 1.5+0.10/-0.0 | 4.0±0.10 | 2.0±0.10 | 0.4±0.10 |
| ED-04W | 24.00±0.20 | 10.3±0.10 | 11.3±0.10 | 9.70±0.10 | 16.00±0.20 | 1.75±0.10 | 11.5±0.10 | 1.5+0.10/-0.0 | 4.0±0.10 | 2.0±0.10 | 0.4±0.10 |
| ED-02W | 24.0+0.3/-0.15 | 12.6±0.15 | 12.6±0.15 | 10.0±0.15 | 20.00±0.15 | 1.75±0.15 | 11.5±0.15 | 1.5+0.15/-0.0 | 4.0±0.15 | 2.0±0.15 | 0.4±0.10 |