

SMD POWER INDUCTORS

Series PS Shielded



FEATURES

- ◆ Magnetics Shielded surface mount inductor with high current rating
- ◆ Low resistance to keep power loss minimum..

APPLICATIONS

- ◆ DC to DC Converter
- ◆ Power supply for VTRs
- ◆ OA equipment
- ◆ LCD Television
- ◆ Notebook ' Computer' Interface Card... Etc.

PRODUCT IDENTIFICATION

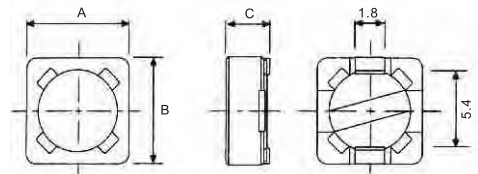
PS **06** **X** **03** **2** **M** **10U**
a **b** **c** **d** **e** **f** **g**

- a : Type of Products - SMD Power Inductors PS series.
- b : Dimension(mm) - 06 : 6.8X6.2 07 : 7.3X7.3 12 : 12X12
- c : Materials - X = No Define
- d : Thickness(mm) - 03 = 3.2 04 = 4.6 05 = 5.0 6 = 6.0 08 = 8.0
- e : Packing - PCS/REEL - 2 = 2000, 1 = 1000, I = 500
- f : Tolerance - M : ±20% 3 : ±30%
- g : Inductance - 100N = 0.1uH, 10U = 10.0 uH, 1M2 = 1200uH

SHAPES & DIMENSIONS

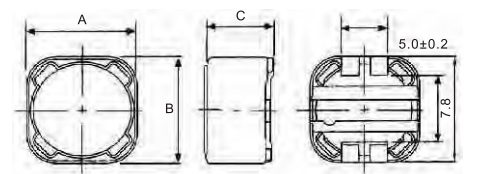
Dimensions in mm

| Type | A | B | C |
|---------|---------|---------|----------|
| PS06X03 | 6.8±0.3 | 6.2±0.3 | 3.2 Max. |
| PS07X03 | 7.3±0.3 | 7.3±0.3 | 3.2±0.3 |
| PS07X04 | 7.3±0.3 | 7.3±0.3 | 4.6 Max. |



Dimensions in mm

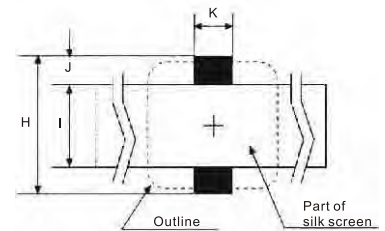
| Type | A | B | C |
|---------|--------|--------|----------|
| PS12X05 | 12±0.5 | 12±0.5 | 5.0 Max. |
| PS12X06 | 12±0.5 | 12±0.5 | 6.0 Max. |
| PS12X08 | 12±0.5 | 12±0.5 | 8.0 Max. |



RECOMMENDED LAND PATTERNS FOR SMD

Dimensions in mm

| Type | H | I | J | K |
|---------|------|-----|-----|-----|
| PS06X03 | 8.0 | 4.8 | 2.0 | 1.5 |
| PS07X03 | 7.8 | 4.8 | 1.5 | 2.2 |
| PS07X04 | 7.8 | 4.8 | 1.5 | 2.2 |
| PS12X05 | 12.6 | 7.0 | 2.8 | 5.4 |
| PS12X06 | 12.6 | 7.0 | 2.8 | 5.4 |
| PS12X08 | 12.6 | 7.0 | 2.8 | 5.4 |



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ELECTRICAL CHARACTERISTICS

| Part Number | Inductance (μ H) | RDC (Ω) Max. | Rated D.C Current (A) Max. |
|---------------|-----------------------|-----------------------|----------------------------|
| PS06X032□1U2 | 1.0 | 0.030 | 3.00 |
| PS06X032□1U5 | 1.5 | 0.032 | 2.20 |
| PS06X032□2U9 | 2.9 | 0.068 | 1.94 |
| PS06X032□4U | 4.0 | 0.080 | 1.63 |
| PS06X032□5U5 | 5.5 | 0.096 | 1.40 |
| PS06X032□10U | 10 | 0.150 | 1.10 |
| PS06X032□12U | 12 | 0.200 | 1.00 |
| PS06X032□15U | 15 | 0.230 | 0.90 |
| PS06X032□18U | 18 | 0.270 | 0.80 |
| PS06X032□22U | 22 | 0.340 | 0.74 |
| PS06X032□27U | 27 | 0.380 | 0.66 |
| PS06X032□33U | 33 | 0.450 | 0.59 |
| PS06X032□39U | 39 | 0.490 | 0.54 |
| PS06X032□47U | 47 | 0.690 | 0.50 |
| PS06X032□56U | 56 | 0.780 | 0.46 |
| PS06X032□68U | 68 | 1.070 | 0.42 |
| PS06X032□82U | 82 | 1.210 | 0.38 |
| PS06X032□100U | 100 | 1.390 | 0.34 |
| PS06X032□120U | 120 | 1.900 | 0.31 |
| PS06X032□150U | 150 | 2.180 | 0.28 |
| PS06X032□180U | 180 | 2.770 | 0.26 |
| PS06X032□220U | 220 | 3.200 | 0.23 |
| PS06X032□270U | 270 | 4.380 | 0.22 |
| PS06X032□330U | 330 | 4.940 | 0.19 |
| PS06X032□470U | 470 | 5.00 | 0.16 |
| PS06X032□560U | 560 | 5.23 | 0.15 |
| PS07X031□4U7 | 4.7 | 0.065 | 2.27 |
| PS07X031□10U | 10 | 0.076 | 1.68 |
| PS07X031□12U | 12 | 0.098 | 1.52 |
| PS07X031□15U | 15 | 0.150 | 1.33 |
| PS07X031□18U | 18 | 0.170 | 1.20 |
| PS07X031□22U | 22 | 0.190 | 1.07 |
| PS07X031□27U | 27 | 0.230 | 0.96 |
| PS07X031□33U | 33 | 0.280 | 0.91 |
| PS07X031□39U | 39 | 0.340 | 0.77 |
| PS07X031□47U | 47 | 0.360 | 0.76 |
| PS07X031□56U | 56 | 0.470 | 0.68 |
| PS07X031□68U | 68 | 0.520 | 0.61 |
| PS07X031□82U | 82 | 0.690 | 0.57 |
| PS07X031□100U | 100 | 0.790 | 0.50 |
| PS07X031□120U | 120 | 0.890 | 0.49 |
| PS07X031□150U | 150 | 1.270 | 0.43 |
| PS07X031□180U | 180 | 1.450 | 0.39 |
| PS07X031□220U | 220 | 1.650 | 0.35 |
| PS07X031□270U | 270 | 2.310 | 0.32 |
| PS07X031□330U | 330 | 2.620 | 0.28 |
| PS07X031□390U | 390 | 2.940 | 0.26 |
| PS07X031□470U | 470 | 4.180 | 0.24 |
| PS07X031□560U | 560 | 4.670 | 0.22 |
| PS07X031□680U | 680 | 5.730 | 0.19 |
| PS07X031□820U | 820 | 6.540 | 0.18 |
| PS07X031□1M | 1000 | 9.440 | 0.16 |

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| Part Number | Inductance (μ H) | RDC (Ω) Max. | Rated D.C Current (A) Max. |
|---------------|--------------------------|-----------------------|-------------------------------|
| PS07X041□4U7 | 4.7 | 0.047 | 2.47 |
| PS07X041□10U | 10 | 0.056 | 1.84 |
| PS07X041□12U | 12 | 0.060 | 1.71 |
| PS07X041□15U | 15 | 0.085 | 1.47 |
| PS07X041□18U | 18 | 0.100 | 1.31 |
| PS07X041□22U | 22 | 0.110 | 1.23 |
| PS07X041□27U | 27 | 0.180 | 1.12 |
| PS07X041□33U | 33 | 0.250 | 0.96 |
| PS07X041□39U | 39 | 0.260 | 0.91 |
| PS07X041□47U | 47 | 0.280 | 0.88 |
| PS07X041□56U | 56 | 0.380 | 0.75 |
| PS07X041□68U | 68 | 0.400 | 0.69 |
| PS07X041□82U | 82 | 0.430 | 0.61 |
| PS07X041□100U | 100 | 0.610 | 0.60 |
| PS07X041□120U | 120 | 0.660 | 0.52 |
| PS07X041□150U | 150 | 0.880 | 0.46 |
| PS07X041□180U | 180 | 0.980 | 0.42 |
| PS07X041□220U | 220 | 1.170 | 0.36 |
| PS07X041□270U | 270 | 1.640 | 0.34 |
| PS07X041□330U | 330 | 1.860 | 0.32 |
| PS07X041□390U | 390 | 2.850 | 0.29 |
| PS07X041□470U | 470 | 3.010 | 0.26 |
| PS07X041□560U | 560 | 3.620 | 0.23 |
| PS07X041□680U | 680 | 4.630 | 0.22 |
| PS07X041□820U | 820 | 5.200 | 0.20 |
| PS07X041□1M | 1000 | 6.000 | 0.18 |

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ELECTRICAL CHARACTERISTICS

| Part Number | Inductance (μ H) | Test Frequency (Hz) | RDC (Ω) Max. | Rated D.C Current (A) Max. |
|---------------|--------------------------|---------------------------|--------------------------|----------------------------------|
| PS12X05I33U9 | 3.9 \pm 30% | 1V/100K | 0.015 | 6.50 |
| PS12X05I34U7 | 4.7 \pm 30% | 1V/100K | 0.018 | 5.70 |
| PS12X05I36U8 | 6.8 \pm 30% | 1V/100K | 0.23 | 4.90 |
| PS12X05I38U2 | 8.2 \pm 30% | 1V/100K | 0.26 | 4.60 |
| PS12X05IM10U | 10 \pm 20% | 1V/100K | 0.028 | 4.50 |
| PS12X05IM12U | 12 \pm 20% | 1V/100K | 0.038 | 4.00 |
| PS12X05IM15U | 15 \pm 20% | 1V/100K | 0.050 | 3.20 |
| PS12X05IM18U | 18 \pm 20% | 1V/100K | 0.057 | 3.10 |
| PS12X05IM22U | 22 \pm 20% | 1V/100K | 0.066 | 2.90 |
| PS12X05IM27U | 27 \pm 20% | 1V/100K | 0.080 | 2.80 |
| PS12X05IM33U | 33 \pm 20% | 1V/100K | 0.097 | 2.70 |
| PS12X05IM39U | 39 \pm 20% | 1V/100K | 0.132 | 2.10 |
| PS12X05IM47U | 47 \pm 20% | 1V/100K | 0.150 | 1.90 |
| PS12X05IM56U | 56 \pm 20% | 1V/100K | 0.190 | 1.80 |
| PS12X05IM68U | 68 \pm 20% | 1V/100K | 0.220 | 1.50 |
| PS12X05IM82U | 82 \pm 20% | 1V/100K | 0.260 | 1.30 |
| PS12X05IM100U | 100 \pm 20% | 1V/100K | 0.308 | 1.20 |
| PS12X05IM120U | 120 \pm 20% | 1V/100K | 0.380 | 1.10 |
| PS12X05IM150U | 150 \pm 20% | 1V/100K | 0.530 | 0.95 |
| PS12X05IM180U | 180 \pm 20% | 1V/100K | 0.620 | 0.85 |
| PS12X05IM220U | 220 \pm 20% | 1V/100K | 0.700 | 0.80 |
| PS12X05IM270U | 270 \pm 20% | 1V/100K | 0.870 | 0.60 |
| PS12X05IM330U | 330 \pm 20% | 1V/100K | 0.990 | 0.50 |
| PS12X06I31U3 | 1.3 \pm 30% | 1V/7.96M | 0.012 | 8.00 |
| PS12X06I32U1 | 2.1 \pm 30% | 1V/7.96M | 0.014 | 7.00 |
| PS12X06I33U1 | 3.1 \pm 30% | 1V/7.96M | 0.017 | 6.00 |
| PS12X06I34U4 | 4.4 \pm 30% | 1V/7.96M | 0.02 | 5.00 |
| PS12X06I35U8 | 5.8 \pm 30% | 1V/7.96M | 0.021 | 4.40 |
| PS12X06I37U5 | 7.5 \pm 30% | 1V/7.96M | 0.024 | 4.30 |
| PS12X06IM10U | 10 \pm 20% | 1V/1K | 0.025 | 4.00 |
| PS12X06IM12U | 12 \pm 20% | 1V/1K | 0.027 | 3.50 |
| PS12X06IM15U | 15 \pm 20% | 1V/1K | 0.030 | 3.30 |
| PS12X06IM18U | 18 \pm 20% | 1V/1K | 0.034 | 3.00 |
| PS12X06IM22U | 22 \pm 20% | 1V/1K | 0.036 | 2.80 |
| PS12X06IM27U | 27 \pm 20% | 1V/1K | 0.051 | 2.30 |
| PS12X06IM33U | 33 \pm 20% | 1V/1K | 0.057 | 2.10 |
| PS12X06IM39U | 39 \pm 20% | 1V/1K | 0.068 | 2.00 |
| PS12X06IM47U | 47 \pm 20% | 1V/1K | 0.075 | 1.80 |
| PS12X06IM56U | 56 \pm 20% | 1V/1K | 0.110 | 1.70 |
| PS12X06IM68U | 68 \pm 20% | 1V/1K | 0.120 | 1.50 |
| PS12X06IM82U | 82 \pm 20% | 1V/1K | 0.140 | 1.40 |
| PS12X06IM100U | 100 \pm 20% | 1V/1K | 0.160 | 1.30 |
| PS12X06IM120U | 120 \pm 20% | 1V/1K | 0.170 | 1.10 |
| PS12X06IM150U | 150 \pm 20% | 1V/1K | 0.230 | 1.00 |
| PS12X06IM180U | 180 \pm 20% | 1V/1K | 0.290 | 0.90 |

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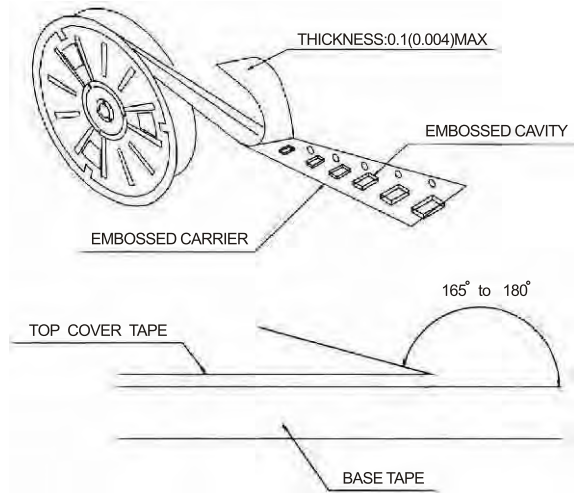
ELECTRICAL CHARACTERISTICS

| Part Number | Inductance (μ H) | Test Frequency (Hz) | RDC (Ω) Max. | Rated D.C Current (A) Max. |
|----------------|--------------------------|---------------------------|--------------------------|----------------------------------|
| PS12X06IM220U | 220 \pm 20% | 1V/1K | 0.400 | 0.80 |
| PS12X06IM270U | 270 \pm 20% | 1V/1K | 0.460 | 0.75 |
| PS12X06IM330U | 330 \pm 20% | 1V/1K | 0.510 | 0.68 |
| PS12X06IM390U | 390 \pm 20% | 1V/1K | 0.690 | 0.65 |
| PS12X06IM470U | 470 \pm 20% | 1V/1K | 0.770 | 0.58 |
| PS12X06IM560U | 560 \pm 20% | 1V/1K | 0.860 | 0.54 |
| PS12X06IM680U | 680 \pm 20% | 1V/1K | 1.200 | 0.48 |
| PS12X06IM820U | 820 \pm 20% | 1V/1K | 1.340 | 0.43 |
| PS12X06IM1M | 1000 \pm 20% | 1V/1K | 1.530 | 0.40 |
| PS12X08I31U2 | 1.2 \pm 30% | 1V/100K | 0.0070 | 9.80 |
| PS12X08I32U4 | 2.4 \pm 30% | 1V/100K | 0.0115 | 8.00 |
| PS12X08I33U5 | 3.5 \pm 30% | 1V/100K | 0.0135 | 7.50 |
| PS12X08I34U7 | 4.7 \pm 30% | 1V/100K | 0.0158 | 6.80 |
| PS12X08I36U1 | 6.1 \pm 30% | 1V/100K | 0.0176 | 6.60 |
| PS12X08I37U6 | 7.6 \pm 30% | 1V/100K | 0.0200 | 5.90 |
| PS12X08IM10U | 10 \pm 20% | 1V/1K | 0.0216 | 5.40 |
| PS12X08IM12U | 12 \pm 20% | 1V/1K | 0.0243 | 4.90 |
| PS12X08IM15U | 15 \pm 20% | 1V/1K | 0.0270 | 4.50 |
| PS12X08IM18U | 18 \pm 20% | 1V/1K | 0.0392 | 3.90 |
| PS12X08IM22U | 22 \pm 20% | 1V/1K | 0.0432 | 3.60 |
| PS12X08IM27U | 27 \pm 20% | 1V/1K | 0.0459 | 3.40 |
| PS12X08IM33U | 33 \pm 20% | 1V/1K | 0.0648 | 3.00 |
| PS12X08IM39U | 39 \pm 20% | 1V/1K | 0.0729 | 2.75 |
| PS12X08IM47U | 47 \pm 20% | 1V/1K | 0.1000 | 2.50 |
| PS12X08IM56U | 56 \pm 20% | 1V/1K | 0.11 | 2.35 |
| PS12X08IM68U | 68 \pm 20% | 1V/1K | 0.14 | 2.10 |
| PS12X08IM82U | 82 \pm 20% | 1V/1K | 0.16 | 1.95 |
| PS12X08IM100U | 100 \pm 20% | 1V/1K | 0.2200 | 1.70 |
| PS12X08IM120U | 120 \pm 20% | 1V/1K | 0.2500 | 1.60 |
| PS12X08IM150U | 150 \pm 20% | 1V/1K | 0.28 | 1.42 |
| PS12X08IM180U | 180 \pm 20% | 1V/1K | 0.3500 | 1.30 |
| PS12X08IM220U | 220 \pm 20% | 1V/1K | 0.39 | 1.16 |
| PS12X08IM270U | 270 \pm 20% | 1V/1K | 0.56 | 1.06 |
| PS12X08IM330U | 330 \pm 20% | 1V/1K | 0.064 | 0.95 |
| PS12X08IM390U | 390 \pm 20% | 1V/1K | 0.7 | 0.88 |
| PS12X08IM470U | 470 \pm 20% | 1V/1K | 0.980 | 0.79 |
| PS12X08IM 560U | 560 \pm 20% | 1V/1K | 1.070 | 0.73 |
| PS12X08IM680U | 680 \pm 20% | 1V/1K | 1.460 | 0.67 |
| PS12X08IM820U | 820 \pm 20% | 1V/1K | 1.640 | 0.60 |
| PS12X08IM1M | 1000 \pm 20% | 1V/1K | 1.820 | 0.55 |

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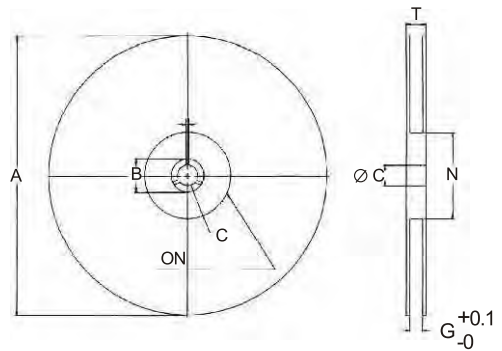
Series **PS** Shielded

PACKAGING FOR SMD



The force for tearing off cover tape is 10 to 60 grams in the arrow direction.

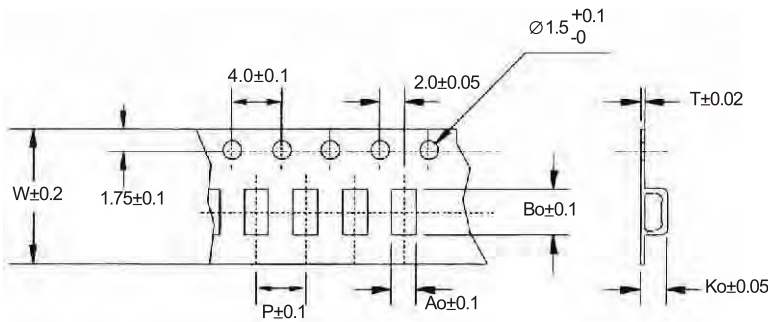
CARRIER TAPE REELS



Unit : mm

| Width | A | B | C | G | N | T | MATERIALS |
|-------|-----|----------|----------|------|-----|------|-----------|
| 8mm | 178 | 21.0±0.8 | 13.0±0.2 | 8.4 | 55 | 12.4 | PLASTIC |
| 12mm | 178 | 21.0±0.8 | 13.0±0.2 | 12.4 | 55 | 16.4 | PAPER |
| 16mm | 178 | 21.0±0.8 | 13.0±0.2 | 16.4 | 55 | 20.4 | PAPER |
| 24mm | 178 | 21.0±0.8 | 13.0±0.2 | 24.4 | 100 | 28.4 | PLASTIC |
| 12mm | 330 | 21.0±0.8 | 13.0±0.2 | 12.4 | 100 | 16.4 | PLASTIC |
| 16mm | 330 | 21.0±0.8 | 13.0±0.2 | 16.4 | 100 | 20.4 | PLASTIC |
| 24mm | 330 | 21.0±0.8 | 13.0±0.2 | 24.4 | 100 | 28.4 | PLASTIC |
| 24mm | 330 | 21.0±0.8 | 13.0±0.2 | 24.4 | 75 | 28.4 | PLASTIC |
| 32mm | 330 | 21.0±0.8 | 13.0±0.2 | 32.4 | 75 | 36.0 | PLASTIC |

TAPE DIMENSION / PACKAGING



Unit : mm

| Type | A0 | B0 | K0 | W | P | T | Q'ty/Reel |
|---------|-------|-------|------|------|------|------|-----------|
| PS06X03 | 6.20 | 6.80 | 3.20 | 12.0 | 12.0 | 0.40 | 2,000 |
| PS07X03 | 7.80 | 7.80 | 3.70 | 16.0 | 12.0 | 0.30 | 1,000 |
| PS07X04 | 7.60 | 7.60 | 5.40 | 16.0 | 12.0 | 0.40 | 1,000 |
| PS12X05 | 12.60 | 12.60 | 5.20 | 24.0 | 16.0 | 0.40 | 500 |
| PS12X06 | 12.60 | 12.60 | 6.00 | 24.0 | 16.0 | 0.40 | 500 |
| PS12X08 | 12.60 | 12.60 | 8.30 | 24.0 | 16.0 | 0.40 | 500 |

