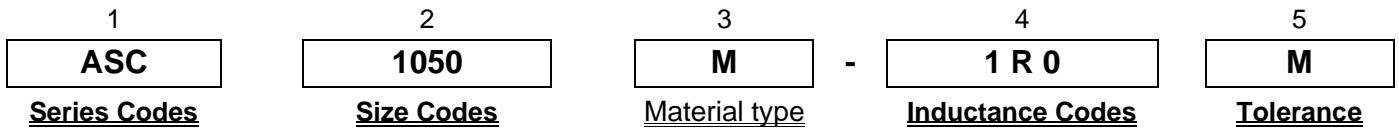




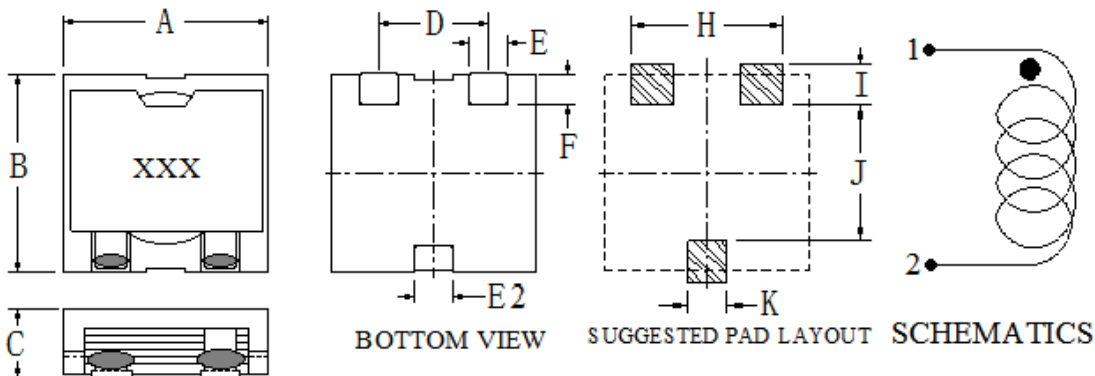
Product description:

1. High current, low loss of iron powder core.
2. Low profile for machine placement.
3. Minimize electromagnetic interference.
4. Suppress common mode noise.
5. Prevent EMI effect via precise impedance.
6. Custom design available.

Explanation of part numbers



Boundary dimension (unit: mm)



| Series Name | A | B | C | D | E | E2 | F | H | I | J | K |
|-------------|---------|---------|---------|---------|-----|-----|-----|------|-----|------|-----|
| ASC1050M | 10.6Max | 10.6Max | 5.5Max | 5.5±0.5 | 2.5 | 1.5 | 2.0 | 8.2 | 2.5 | 5.8 | 2.4 |
| ASC1355M | 13.0Max | 13.5Max | 5.8Max | 6.9±0.5 | 2.5 | 2.5 | 2.0 | 9.8 | 2.5 | 8.0 | 3.0 |
| ASC1390M | 13.0Max | 13.5Max | 9.0Max | 6.9±0.5 | 2.5 | 2.5 | 2.0 | 9.8 | 2.5 | 8.0 | 3.0 |
| ASC1580M | 14.9Max | 15.1Max | 8.2Max | 9.0±0.5 | 2.8 | 2.5 | 1.8 | 13.0 | 2.7 | 10.0 | 3.5 |
| ASC1512M | 14.9Max | 15.1Max | 12.2Max | 9.0±0.5 | 2.8 | 2.5 | 1.8 | 13.0 | 2.7 | 10.0 | 3.5 |



扁平线大功率电感 ASC10/13/15 系列

Flat wire high current power inductors ASC10/13/15 series



Electrical Characteristics: TEST CONDITION: AT 25oC: 100KHz/0.1V

| PART No. | L(0A) (uH±20%) | Irms(A) Type. | Isat(A) Type. | DCR(mΩ) Type. | DCR(mΩ)M ax. | COILCRAFT P/N |
|---------------|-------------------|------------------|------------------|------------------|-----------------|------------------|
| ASC1050M-R80M | 0.80 | 16.3 | 25.6 | 3.8 | 4.0 | SER1052-801ML |
| ASC1050M-1R0M | 1.00 | 16.3 | 17.5 | 3.8 | 4.0 | SER1052-102ML |
| ASC1050M-1R2M | 1.20 | 15.0 | 21.3 | 5.4 | 6.0 | SER1052-122ML |
| ASC1050M-1R3M | 1.30 | 16.3 | 17.2 | 3.8 | 4.0 | SER1052-132ML |
| ASC1050M-1R5M | 1.50 | 15.0 | 14.5 | 3.8 | 4.0 | SER1052-152ML |
| ASC1050M-1R8M | 1.80 | 15.0 | 14.3 | 5.4 | 6.0 | SER1052-182ML |
| ASC1050M-2R0M | 2.00 | 11.5 | 16.2 | 7.8 | 9.0 | SER1052-202ML |
| ASC1050M-2R2M | 2.20 | 16.3 | 10.0 | 3.8 | 4.0 | SER1052-222ML |
| ASC1050M-2R5M | 2.50 | 12.0 | 12.1 | 5.4 | 7.5 | SER1052-252ML |
| ASC1050M-3R2M | 3.20 | 15.0 | 8.5 | 5.4 | 6.0 | SER1052-322ML |
| ASC1050M-4R0M | 4.00 | 11.5 | 8.8 | 7.8 | 9.0 | SER1052-402ML |
| ASC1050M-4R3M | 4.30 | 12.0 | 7.0 | 5.4 | 7.5 | SER1052-432ML |
| ASC1050M-5R7M | 5.70 | 11.5 | 6.0 | 7.8 | 9.0 | SER1052-572ML |
| ASC1355M-R33M | 0.33 | 16.9 | 43.0 | 0.77 | 0.85 | SER1360-331KL |
| ASC1355M-R65M | 0.65 | 16.9 | 28.0 | 0.77 | 0.85 | SER1360-651KL |
| ASC1355M-1R0M | 1.00 | 13.0 | 33.5 | 2.36 | 2.60 | SER1360-102KL |
| ASC1355M-1R8M | 1.80 | 13.0 | 20.0 | 2.36 | 2.60 | SER1360-182KL |
| ASC1355M-2R7M | 2.70 | 13.0 | 14.0 | 2.36 | 2.60 | SER1360-272KL |
| ASC1355M-4R0M | 4.00 | 9.4 | 13.0 | 5.50 | 6.05 | SER1360-402KL |
| ASC1355M-4R7M | 4.70 | 9.4 | 12.0 | 5.50 | 6.05 | SER1360-472KL |
| ASC1355M-6R0M | 6.00 | 9.4 | 9.5 | 5.50 | 6.05 | SER1360-602KL |
| ASC1355M-8R0M | 8.00 | 7.6 | 9.0 | 9.83 | 10.81 | SER1360-802KL |
| ASC1355M-100M | 10.0 | 7.2 | 7.5 | 9.83 | 10.81 | SER1360-103KL |
| ASC1390M-100M | 10.0 | 9.2 | 13.16 | 13.7 | 15.0 | SER1390-103ML |
| ASC1390M-150M | 15.0 | 9.2 | 8.6 | 13.7 | 15.0 | SER1390-153ML |
| ASC1390M-220M | 22.0 | 7.7 | 7.36 | 21.0 | 23.1 | SER1390-223ML |
| ASC1390M-330M | 33.0 | 7.7 | 4.76 | 21.0 | 23.1 | SER1390-333ML |
| ASC1390M-470M | 47.0 | 7.7 | 3.2 | 21.0 | 23.1 | SER1390-473ML |



扁平线大功率电感 ASC10/13/15 系列

Flat wire high current power inductors ASC10/13/15 series



Electrical Characteristics: TEST CONDITION: AT 25°C: 100KHz/0.1V

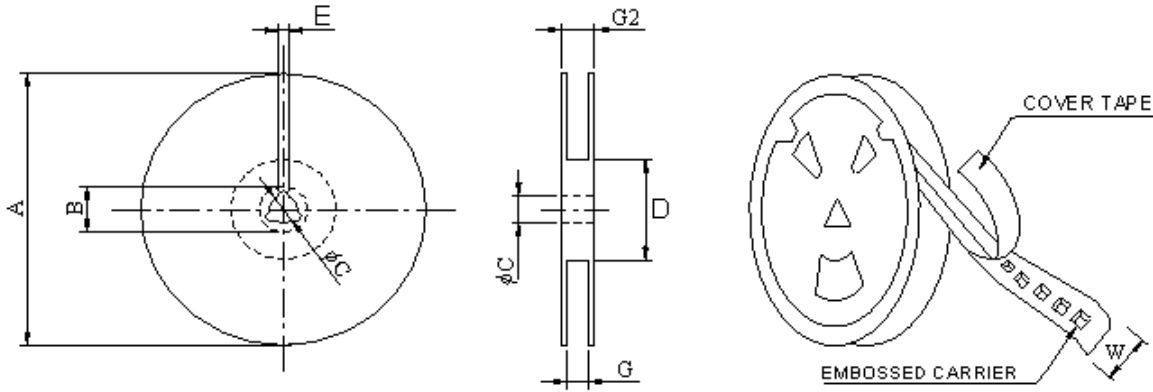
| PART No. | L(0A) (uH±20%) | Irms(A) Type. | Isat(A) Type. | DCR(mΩ) Type. | DCR(mΩ) Max. | Sumida P/N |
|----------------|-------------------|------------------|------------------|------------------|-----------------|----------------------|
| ASC1580M-R40N | 0.4±30% | 23.0 | 66.0 | 1.0 | 1.2 | C |
| ASC1580M-R90M | 0.9 | 21.5 | 45.0 | 1.2 | 1.5 | CDEP147NP-0R9MC-95 |
| ASC1580M-1R5M | 1.5 | 20.0 | 34.0 | 1.7 | 2.0 | CDEP147NP-1R5MC-95 |
| ASC1580M-2R4M | 2.4 | 17.5 | 28.0 | 2.7 | 3.2 | CDEP147NP-2R4MC-95 |
| ASC1580M-3R4M | 3.4 | 16.0 | 23.0 | 4.1 | 5.0 | CDEP147NP-3R4MC-95 |
| ASC1580M-4R7M | 4.7 | 12.5 | 19.0 | 5.0 | 6.0 | CDEP147NP-4R7MC-95 |
| ASC1580M-6R1M | 6.1 | 11.0 | 18.5 | 6.5 | 7.8 | CDEP147NP-6R1MC-95 |
| ASC1580M-7R7M | 7.7 | 10.0 | 15.5 | 8.2 | 9.9 | CDEP147NP-7R7MC-95 |
| ASC1580M-9R5M | 9.5 | 8.5 | 14.0 | 11.1 | 13.3 | CDEP147NP-9R5MC-95 |
| ASC1580M-100M | 10.0 | 10 | 11.5 | 8.2 | 9.9 | CDEP147NP-100MC-125 |
| ASC1580M-120M | 12.0 | 8.5 | 10.0 | 11.1 | 13.3 | CDEP147NP-120MC-125 |
| ASC1580M-470M | 47.0 | 2.5 | 3.0 | 22.3 | 27.0 | NO |
| ASC1512M-7R4M | 7.4 | 13.0 | 10.8 | 3.7 | 4.5 | CDEP1411NP-7R4MC-150 |
| ASC1512M-100M | 10.0 | 12.5 | 9.2 | 4.5 | 5.4 | CDEP1411NP-100MC-150 |
| ASC1512M-120M | 12.0 | 10.3 | 8.5 | 6.3 | 7.6 | CDEP1411NP-120MC-150 |
| ASC1512M-150M | 15.0 | 9.6 | 8.0 | 7.0 | 8.4 | CDEP1411NP-150MC-150 |
| ASC1512M-180M | 18.0 | 9.0 | 7.2 | 8.1 | 9.8 | CDEP1411NP-180MC-150 |
| ASC1512M-220M | 22.0 | 8.3 | 6.4 | 9.4 | 11.3 | CDEP1411NP-220MC-150 |
| ASC1512MH-4R7M | 4.7 | 13.0 | 18.4 | 3.7 | 4.5 | CDEP1411NP-4R7MC-95 |
| ASC1512MH-6R1M | 6.1 | 12.5 | 16.4 | 4.5 | 5.4 | CDEP1411NP-6R1MC-95 |
| ASC1512MH-7R7M | 7.7 | 10.3 | 14.8 | 6.3 | 7.6 | CDEP1411NP-7R7MC-95 |
| ASC1512MH-100M | 10.0 | 9.6 | 13.1 | 7.0 | 7.4 | CDEP1411NP-100MC-95 |
| ASC1512MH-120M | 12.0 | 9.0 | 11.8 | 8.7 | 9.8 | CDEP1411NP-120MC-95 |
| ASC1512MH-140M | 14.0 | 8.3 | 10.9 | 9.4 | 11.3 | CDEP1411NP-140MC-95 |

NOTE:

1. All test data is referenced to 25°C ambient.
2. I_{rms}: DC current(A) that will cause an approximate ΔT of 40°C.
3. I_{sat}: DC current(A) that will cause L_o to drop approximate 30%.
4. Operating temperature range is -25°C to 125°C.
5. The part temperature(ambient and temp rise) should not exceed 125°C under worse case operating conditions.

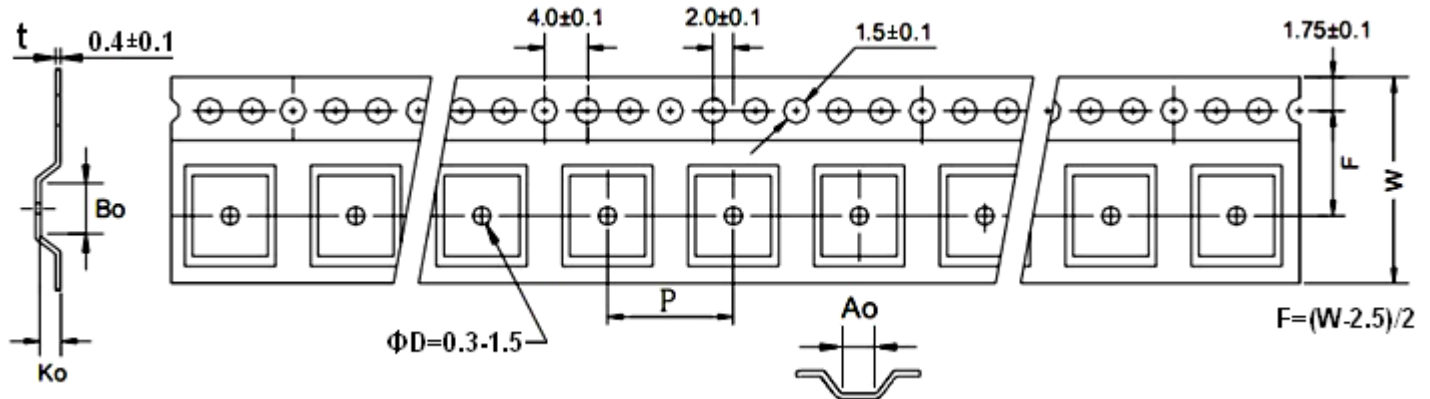
Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.

PACKING INFORMATION



*CARRIER TAPE WIDTH: W

| TYPE | A(Ref.) | B(Ref.) | C(Ref.) | D(Ref.) | E(Ref.) | G(Ref.) | G2(Ref.) |
|----------|---------|---------|---------|---------|---------|----------|----------|
| 13"*24mm | 330±1 | 20±0.8 | 13±0.5 | 100±1 | 2.0±0.5 | 24.5±0.5 | 29±0.5 |



| Series | QTY (Pcs/Reel) | Ao | Bo | Ko | W | P |
|---------|----------------|------|------|------|----|----|
| ASC1050 | 800 Ref. | 10.6 | 10.8 | 6.0 | 24 | 16 |
| ASC1355 | 500 Ref. | 13.4 | 13.6 | 5.8 | 24 | 20 |
| ASC1390 | 300 Ref. | 13.4 | 13.6 | 9.2 | 24 | 20 |
| ASC1580 | 300 Ref. | 14.9 | 15.1 | 8.2 | 24 | 20 |
| ASC1512 | 250 Ref. | 14.9 | 15.1 | 12.2 | 24 | 20 |

Typical Pulling Force: 10-130 grams

