

Compatible with National Semiconductor's Simple Switcher™
Part Number's LM2574, LM2475 and LM2576

Features

- High energy storage with minimum saturation
- High stability from no load to full load
- Available in both SMD and TH versions
- Manufactured in ISO-9001 approved facility
- Operating temperature range: -40°C to +125°C



Electrical Specifications at 25°C ambient

| Part Number | Rated Current (I _{DC}) | L _N (μH) Typical * | L _O (μH) ±20% No DC Load | ET _{OP} (V-μSec) Max. | DCR (Ohms) Max. | Package | | | | | |
|---------------|----------------------------------|-------------------------------|-------------------------------------|--------------------------------|-----------------|---------|-----|-----|-----|-----|-----|
| | | | | | | "C" | "S" | "T" | "B" | "F" | "V" |
| SW_-3.0-47 | 3.0 | 47 | 38 | 90 | 0.05 | 2 | 5 | 5 | | | |
| SWC-3.0-68 | 3.0 | 68 | 55 | 90 | 0.02 | 4 | | | | | |
| SWC-3.0-100 | 3.0 | 100 | 91 | 90 | 0.04 | 4 | | | | | |
| SW_-2.0-150 | 2.0 | 150 | 130 | 90 | 0.10 | 4 | 6 | | | | |
| SW_-1.4-220 | 1.4 | 220 | 230 | 90 | 0.38 | | 5 | 5 | | 2 | 2 |
| SW_-1.4-220 | 1.4 | 220 | 176 | 90 | 0.14 | 3 | 6 | | | | |
| SW_-0.9-330 | 0.9 | 330 | 302 | 90 | 0.74 | | 5 | 5 | | 2 | 2 |
| SW_-0.9-330 | 0.9 | 330 | 267 | 90 | 0.18 | 3 | 6 | | | | |
| SWC-0.64-470 | 0.64 | 470 | 426 | 90 | 0.16 | 4 | | | | | |
| SW_-0.85-680 | 0.85 | 680 | 657 | 90 | 1.25 | | 5 | 5 | | 2 | 2 |
| SWC-3.0-150 | 3.0 | 150 | 136 | 200 | 0.10 | 4 | | | | | |
| SWC-3.0-220 | 3.0 | 220 | 167 | 200 | 0.07 | 5 | | | | | |
| SWC-3.0-330 | 3.0 | 330 | 292 | 200 | 0.15 | 5 | | | | | |
| SWC-2.0-470 | 2.0 | 470 | 369 | 200 | 0.17 | 5 | | | | | |
| SWC-1.3-680 | 1.3 | 680 | 562 | 200 | 0.20 | 5 | | | | | |
| SWC-0.95-1000 | 0.95 | 1000 | 762 | 200 | 0.24 | 5 | | | | | |
| SWB-0.62-1500 | 0.62 | 1500 | 1150 | 200 | 1.00 | | | | 8 | | |
| SWB-0.42-2200 | 0.42 | 2200 | 1730 | 200 | 1.80 | | | | 8 | | |

Notes:

- 1) Inductance will be typical for the I_{DC} and ET_{OP} values listed above.
- 2) No load Inductance will be measured @ 20kHz, 10mVrms.
- 3) Simple Switcher™ is a trademark of National Semiconductor Corporation.

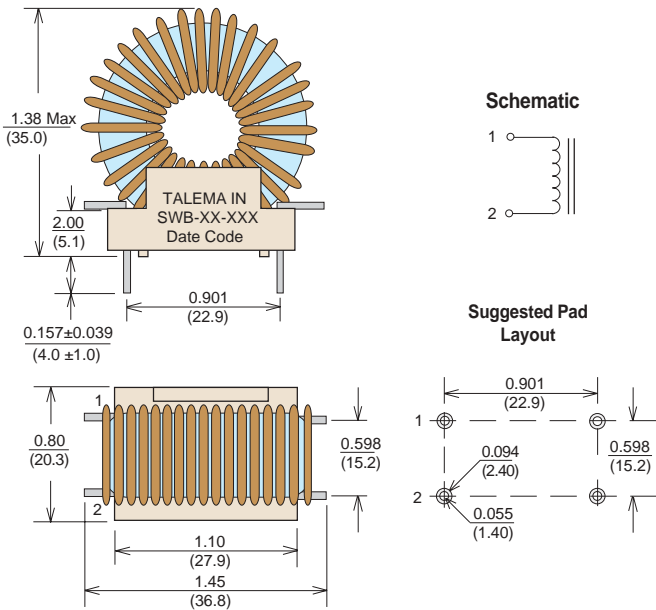
Ordering Key

SW C - 3.0 - 47

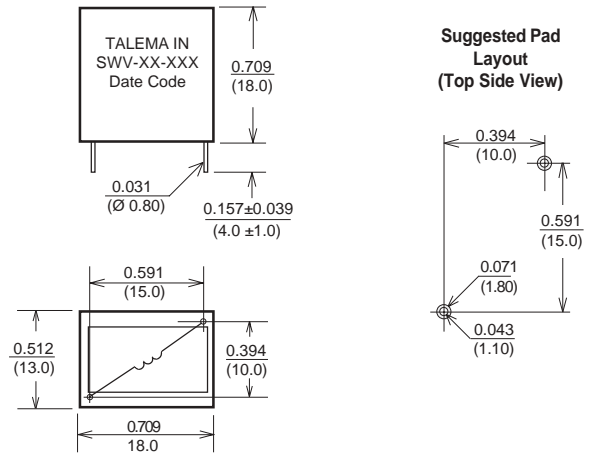
- Inductance Value in μH
- Current Rating (Amps)
- Mounting Style - Specify the appropriate suffix
 - C = Clip Mount
 - S = Surface Mount (S5 or S6)
 - T = Low Profile TH Mount
 - B = Base Mount
 - F = Flat Encapsulated
 - V = Vertical Encapsulated
- Basic Series Designation

Mounting Styles • SW Series - Low Cost Toroidal Inductors

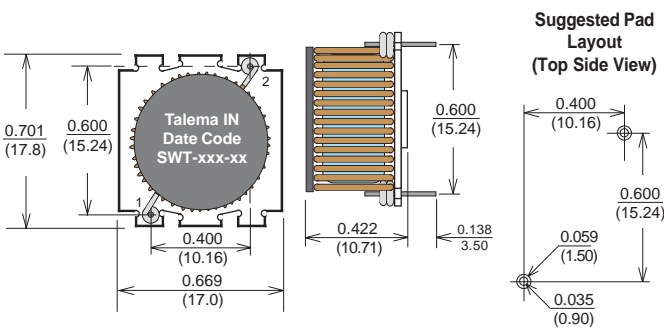
Type "B" - Vertical Mount



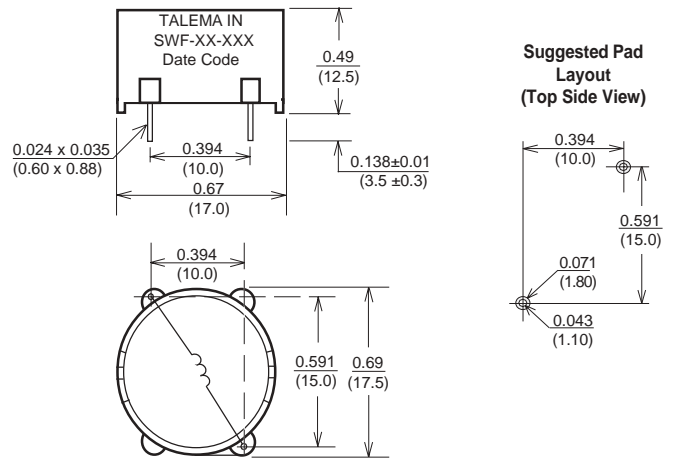
Type "V" - Vertical Mount - Size 2



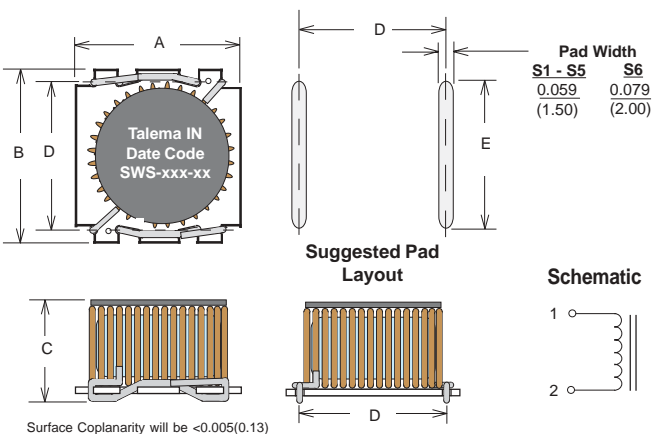
Type SWT - Through Hole Mount



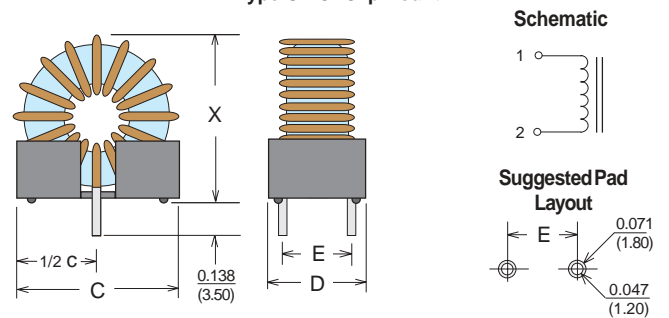
Type "F" - Flat Mount - Size 2



Type SWS - Surface Mount



Type SWC - Clip Mount



| Mounting Style | Size Code | Dimensions - Inches (mm) | | | | |
|----------------|-----------|--------------------------|--------------|--------------|--------------|--------------|
| | | A | B | C | D | E |
| "S" SMD | S5 | 0.669 (17.0) | 0.701 (17.8) | 0.425 (10.8) | 0.591 (15.0) | 0.591 (15.0) |
| | S6 | 0.925 (23.5) | 0.925 (23.5) | 0.531 (13.5) | 0.827 (21.0) | 0.689 (17.5) |

| Mounting Style | Size Code | Dimensions - Inches (mm) | | | |
|-------------------------|-----------|--------------------------|--------------|--------------|-----------------|
| | | C | D | E | X = Coil O.D. + |
| "C" Vertical Clip Mount | C2 | 0.650 (16.5) | 0.449 (11.4) | 0.299 (7.60) | 0.110 (2.80) |
| | C3 | 0.827 (21.0) | 0.449 (11.4) | 0.299 (7.60) | 0.110 (2.80) |
| | C4 | 0.949 (24.1) | 0.598 (15.2) | 0.449 (11.4) | 0.110 (2.80) |
| | C5 | 1.252 (31.8) | 0.701 (17.8) | 0.500 (12.7) | 0.130 (3.30) |

Pulse Engineering - Talema

| Pulse Eng. Part Number | Talema Part Number* | | | | | |
|------------------------------|------------------------------|-------------------------------|-----------------|--------------------------------|-------------------------|-----------------------------|
| | Vertical Clip Mount | Flat Open SMD | Flat Open TH | Vertical TH Base Mount | Flat TH Encapsulated | Vertical TH Encapsulated |
| PE-53112 PE-92114K | SWC-3.0-47 SWC-3.0-68 | SWS-3.0-47 | SWT-3.0-47 | | | |
| PE-92108K PE-53113 | SWC-3.0-100 SWC-2.0-150 | SWS-2.0-150 | | | | |
| PE-52626 PE-53145 | | SWS-1.4-220 SWS6-1.4-220 | SWT-1.4-220 | | SWF-1.4-220 | SWV-1.4-220 |
| PE-52627 PE-53146 | | SWS-0.90-330 SWS6-0.90-330 | SWT-0.90-330 | | SWF-0.90-330 | SWV-0.90-330 |
| PE-53114 PE-52629 | SWC-0.64-470 | | | | | |
| | | SWS-0.85-680 | SWT-0.85-680 | | SWF-0.85-680 | SWV-0.85-680 |
| PE-53115 PE-53116 | SWC-3.0-150 SWC-3.0-220 | | | | | |
| PE-53117 PE-53118 | SWC-3.0-330 SWC-2.0-470 | | | | | |
| PE-53119 PE-53120 | SWC-1.3-680 SWC-0.95-1000 | | | | | |
| PE-53121 PE-53122 | | | | SWB-0.62-1500 SWB-0.42-2200 | | |

*Note: There are no equivalent Pulse SMD types for Talema P/N SWT-3.0-47 and the SWS style SMD package.