

SW Series • Inductors for National's 50kHz Simple Switcher™

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

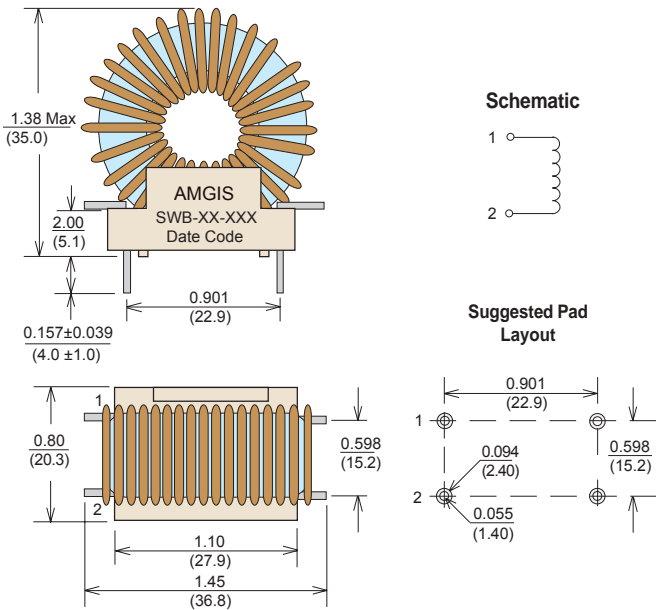
AMGIS, LLC * 10830 Kinghurst Dr. Houston, TX 77099

Phone: 832-775-1319 * Fax: 281-933-9067* email: sales@amgistoroids.com

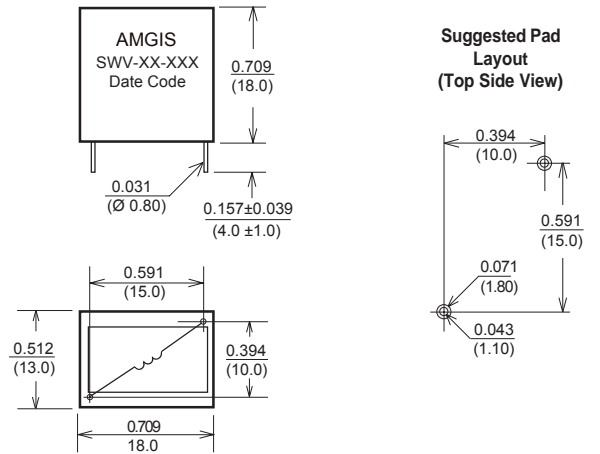
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Mounting Styles • SW Series • Low Cost Toroidal Inductors

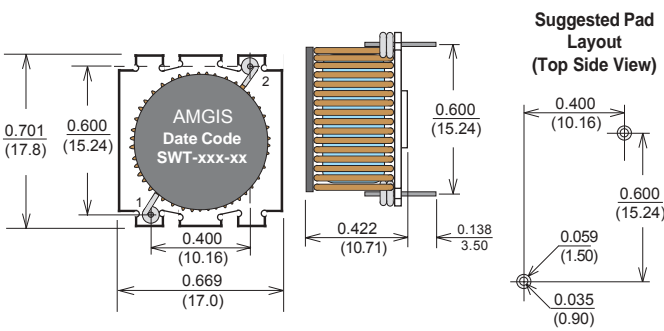
Type "B" - Vertical Mount



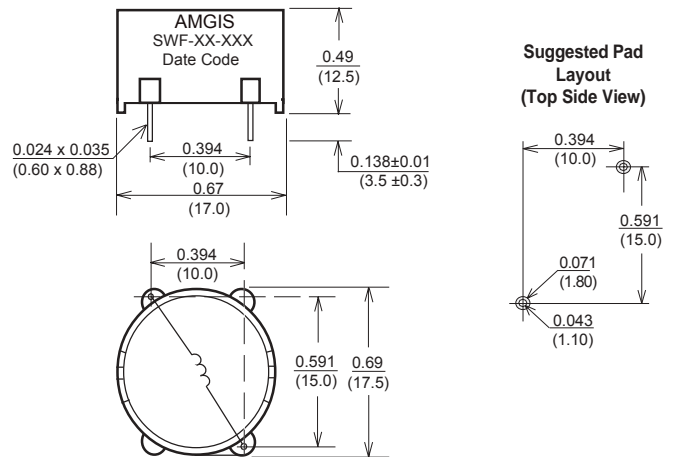
Type "V" - Vertical Mount - Size 2



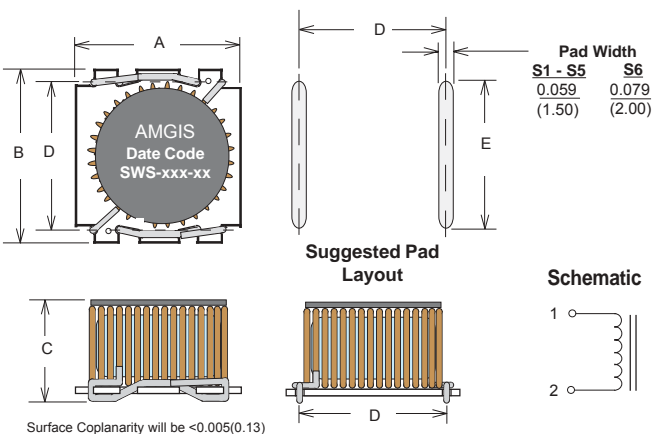
Type SWT - Through Hole Mount



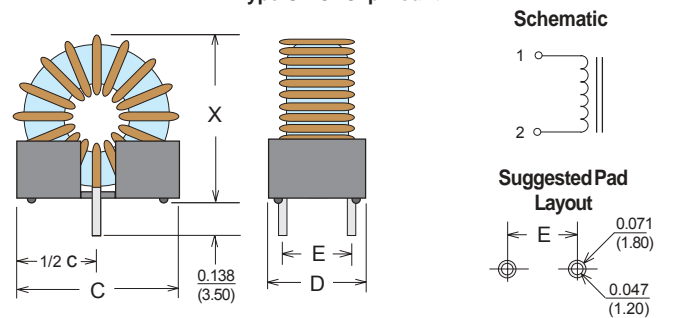
Type "F" - Flat Mount - Size 2



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)

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SW Series Cross Reference for National's 50kHz Simple Switcher™

Pulse Engineering - 5 A; ⚡

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	SWC-1.4-220	SWS-1.4-220 SWS6-1.4-220	SWT-1.4-220		SWF-1.4-220	SWV-1.4-220
PE-52627 PE-53146	SWC-0.90-330	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 ⚡ P/N SWT-3.0-47 and the SWS style SMD package.

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