

Winding Type Chip Inductor

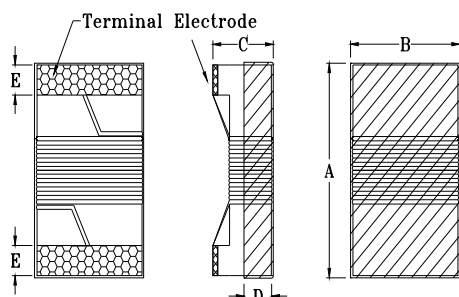
SWF2012CV-SERIES

1. Features

1. Ferrite core wire wound construction.
2. High Reliability due to wire wound type construction.
3. Small footprint as well as low profile.
4. Application for DC power line.
5. 100% Lead(Pb) & Halogen-Free and RoHS compliant.
6. High reliability -Reliability tests comply with AEC-Q200
7. Operating temperature -55~+125°C (Including self - temperature rise)



2. Dimensions



Size	A	B	C	D	E
SWF2012	2.40 max.	1.60 max.	1.40 max.	0.51 ref.	0.44±0.10

Unit:mm

3. Part Numbering

SWF	2012	C	V	-	R47	M
A	B	C	D		E	F

A: Series

B: Dimension

C: Application

D: Category Code

E: Inductance

F: Inductance Tolerance

L x W

DC Power Line

V=Vehicle

R47=0.47 uH

K=±10%, M=±20%

4. Specification

TAI-TECH Part Number	Inductance (uH)	Tolerance	Test Frequency (Hz)	Q min.	Test Frequency (MHz)	Rated Current (mA) max.	DCR (Ω) max.	SRF (MHz) min.
SWF2012CV-R47□	0.47	K,M	0.5V/7.96M	10	7.96	750	0.20	720
SWF2012CV-R56□	0.56	K,M	0.5V/7.96M	10	7.96	730	0.21	665
SWF2012CV-R68□	0.68	K,M	0.5V/7.96M	10	7.96	670	0.28	565
SWF2012CV-R82□	0.82	K,M	0.5V/7.96M	10	7.96	650	0.31	545
SWF2012CV-1R0□	1.00	K,M	0.5V/7.96M	10	7.96	615	0.34	525
SWF2012CV-1R2□	1.20	K,M	0.5V/7.96M	10	7.96	550	0.39	473
SWF2012CV-1R5□	1.50	K,M	0.5V/7.96M	10	7.96	520	0.45	300
SWF2012CV-1R8□	1.80	K,M	0.5V/7.96M	10	7.96	500	0.48	230
SWF2012CV-2R2□	2.20	K,M	0.5V/7.96M	10	7.96	420	0.67	215

TAI-TECH Part Number	Inductance (μ H)	Tolerance	Test Frequency (Hz)	Q min.	Test Frequency (MHz)	Rated Current (mA) max.	DCR (Ω) max.	SRF (MHz) min.
SWF2012CV-2R7□	2.70	K,M	0.5V/7.96M	10	7.96	410	0.74	140
SWF2012CV-3R3□	3.30	K,M	0.5V/7.96M	10	7.96	385	0.81	95
SWF2012CV-3R9□	3.90	K,M	0.5V/7.96M	10	7.96	372	0.88	57
SWF2012CV-4R7□	4.70	K,M	0.5V/7.96M	10	7.96	345	0.99	51
SWF2012CV-5R6□	5.60	K,M	0.5V/7.96M	10	7.96	335	1.06	44
SWF2012CV-6R8□	6.80	K,M	0.5V/7.96M	10	7.96	315	1.21	39
SWF2012CV-8R2□	8.20	K,M	0.5V/7.96M	10	7.96	295	1.33	33
SWF2012CV-100□	10.0	K,M	0.5V/2.52M	10	2.52	260	1.79	30
SWF2012CV-120□	12.0	K,M	0.5V/2.52M	10	2.52	250	1.98	27
SWF2012CV-150□	15.0	K,M	0.5V/2.52M	10	2.52	215	2.68	22
SWF2012CV-180□	18.0	K,M	0.5V/2.52M	10	2.52	195	3.12	20
SWF2012CV-220□	22.0	K,M	0.5V/2.52M	10	2.52	180	3.48	18
SWF2012CV-270□	27.0	K,M	0.5V/2.52M	10	2.52	170	3.84	16
SWF2012CV-330□	33.0	K,M	0.5V/2.52M	10	2.52	145	4.34	15

5. Recommended PC Board Pattern

Chip size							Land Patterns For Reflow Soldering		
Series	Type	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)	L(mm)	G(mm)	H(mm)
SWF	2012	2.40max	1.60max	1.40max	0.51 ref.	0.44±0.1	2.80	1.20	1.78

