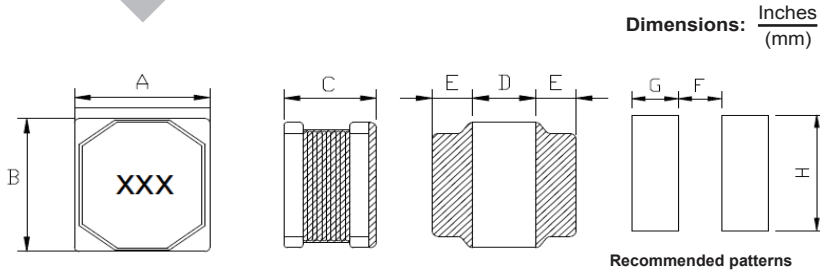




SMD SEMI SHIELDED POWER CHIP INDUCTOR

PCHP54



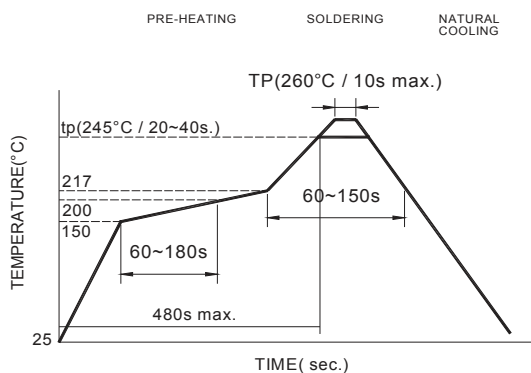
A	B	C	D	E	F	G	H
.197±.008 5.0±0.2	.197±.008 5.0±0.2	0.158 4.0 Max	.08±.008 2.0±0.2	.059±.008 1.5±0.2	.091 2.3	.055 1.4	.165 4.2



Allied Part Number	Inductance (µH)	Tolerance (%)*	Test Freq. (KHz @1V)	SRF (MHz) Min	DCR (Ω) ±30%	Isat (A) Max	Irms (A) Max
PCHP54-1R0N-RC	1.0	30	100	117	.012	7.35	4.90
PCHP54-1R2N-RC	1.2	30	100	110	.016	6.50	4.15
PCHP54-1R5N-RC	1.5	30	100	86	.018	6.30	4.00
PCHP54-2R2N-RC	2.2	30	100	50	.019	4.90	3.80
PCHP54-2R7N-RC	2.7	30	100	37	.022	4.30	3.60
PCHP54-3R3_*-RC	3.3	20,30	100	32	.024	3.95	3.40
PCHP54-3R9N-RC	3.9	30	100	29	.027	3.55	3.20
PCHP54-4R7M-RC	4.7	20	100	28	.032	3.50	3.00
PCHP54-5R6M-RC	5.6	20	100	27	.035	3.00	2.80
PCHP54-6R8M-RC	6.8	20	100	21	.043	2.90	2.50
PCHP54-100M-RC	10	20	100	18	.064	2.35	2.10
PCHP54-150M-RC	15	20	100	13	.086	2.00	2.00
PCHP54-220M-RC	22	20	100	11	.129	1.60	1.50
PCHP54-330M-RC	33	20	100	9.1	.188	1.30	1.20
PCHP54-470M-RC	47	20	100	6.7	.272	1.10	1.00
PCHP54-680M-RC	68	20	100	5.7	.400	0.90	0.80
PCHP54-101M-RC	100	20	100	4.7	.560	0.75	0.70
PCHP54-151M-RC	150	20	100	5.0	.750	0.65	0.60
PCHP54-221M-RC	220	20	100	3.0	1.28	0.40	0.38
PCHP54-102M-RC	1000	20	100	2.0	6.20	0.25	0.25
PCHP54-222M-RC	2200	20	100	2.0	13.0	0.10	0.10

\*Insert letter for desired tolerance: N=30%, M=20%  
All specifications subject to change without notice.

Reflow Solder Profile



Reflow times: 3 times max.

Features

- Semi Magnetically Shielded
- High Current
- Low DC Resistance

Electrical

**Inductance Range:** 1.0 - 2200µH  
**Tolerance:** 30% 1.0-3.9µH, 20% 4.7-2200µH  
**Operating Temp:** -40°C to +125°C  
**Isat:** DC current at which the inductance drops approximately 30% from its value without current.  
**Irms:** DC current that causes the temperature rise (ΔT = 40°C) from 25°C ambient.

Resistance to Soldering Heat

**Pre-Heat:** 150°C, 1Min  
**Solder Composition:** Sn96.5%, AG3%, Cu0.5%  
**Temperature:** 245±5°C  
**Flux for Lead Free:** Rosin 9.5%  
**Dip Time:** 4±1Sec  
**Depth:** Completely cover the termination

Test Equipment

**(L):** Agilent 4284A, CH11025, CH3302, CH1320, CH1320S LCR Meter  
**(DCR):** CH16502, Agilent 33420A Micro-oHm Meter

Physical

**Packaging:** 1500 per 13" Reel  
**Marking:** EIA Code