

SMD Power Inductor CR54



Halogen Free



Description

- Ferrite drum core construction.
- Magnetically unshielded.
- L × W × H: 6.1 × 5.6 × 4.85 mm Max.
- Product weight: 0.41g(Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.
- Halogen Free available.

Environmental Data

- Operating temperature range: -40°C~+100°C (including coil's self temperature rise)
- Storage temperature range: -40°C~+100°C
- Solder reflow temperature: 260 °C peak.

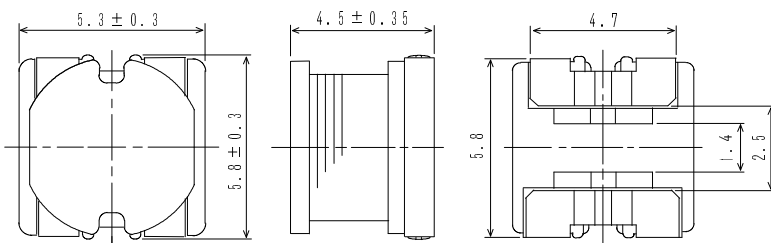
Packaging

- Carrier tape and reel packaging
- 12.9" diameter reel
- 1500pcs per reel

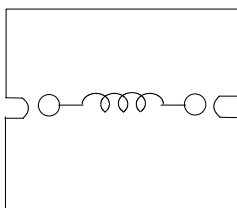
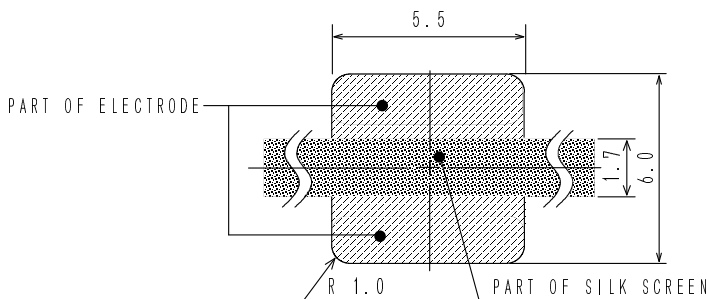
Applications

- Ideally used in A/V equipment, LCD TV, DSC/DVC, Game Machine, DVC, HDD, Notebook PC, etc as DC-DC converter inductors.

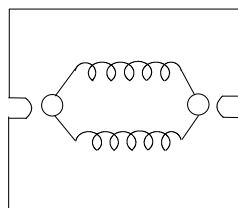
Dimension - [mm]



Land pattern and Schematics - [mm]



10 μ H ~ 220 μ H



2.2 μ H ~ 8.5 μ H

SMD Power Inductor CR54



Electrical Characteristics

Part Name	Stamp	Inductance (μ H) [within] ※ 1	D.C.R. (Ω) [Max.] (at 20°C)	Rated Current (A)※2
CR54NP-2R2MC	2R2	2.2 \pm 20 %	23.4m	3.84
CR54NP-2R7MC	2R7	2.7 \pm 20 %	26.0m	3.44
CR54NP-3R3MC	3R3	3.3 \pm 20 %	28.6m	3.20
CR54NP-3R9MC	3R9	3.9 \pm 20 %	35.1m	3.00
CR54NP-4R4MC	4R4	4.4 \pm 20 %	39.0m	2.80
CR54NP-5R0MC	5R0	5.0 \pm 20 %	44.2m	2.60
CR54NP-5R6MC	5R6	5.6 \pm 20 %	49.4m	2.48
CR54NP-6R4MC	6R4	6.4 \pm 20 %	52.0m	2.20
CR54NP-7R6MC	7R6	7.6 \pm 20 %	62.4m	2.08
CR54NP-8R5MC	8R5	8.5 \pm 20 %	67.6m	1.84
CR54NP-100MC	100	10 \pm 20 %	0.10	1.44
CR54NP-120MC	120	12 \pm 20 %	0.12	1.40
CR54NP-150MC	150	15 \pm 20 %	0.14	1.30
CR54NP-180MC	180	18 \pm 20 %	0.15	1.23
CR54NP-220MC	220	22 \pm 20 %	0.18	1.11
CR54NP-270MC	270	27 \pm 20 %	0.20	0.97
CR54NP-330LC	330	33 \pm 15 %	0.23	0.88
CR54NP-390LC	390	39 \pm 15 %	0.32	0.80
CR54NP-470LC	470	47 \pm 15 %	0.37	0.72
CR54NP-560KC	560	56 \pm 10 %	0.42	0.68
CR54NP-680KC	680	68 \pm 10 %	0.46	0.61
CR54NP-820KC	820	82 \pm 10 %	0.60	0.58
CR54NP-101KC	101	100 \pm 10 %	0.70	0.52
CR54NP-121KC	121	120 \pm 10 %	0.93	0.48
CR54NP-151KC	151	150 \pm 10 %	1.10	0.40
CR54NP-181KC	181	180 \pm 10 %	1.38	0.38
CR54NP-221KC	221	220 \pm 10 %	1.57	0.35

※1. Inductance measuring frequency: 2.2 μ H ~ 8.5 μ H ; at 7.96 MHz
 10 μ H ~ 82 μ H ; at 2.52 MHz
 100 μ H ~ 220 μ H ; at 1 kHz

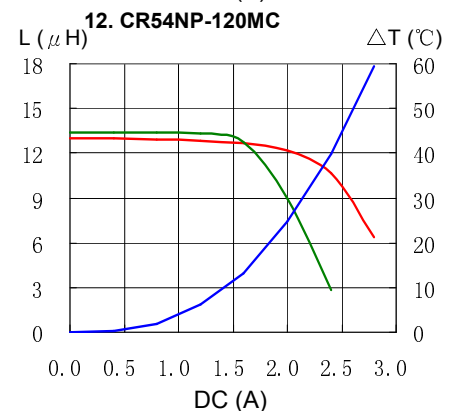
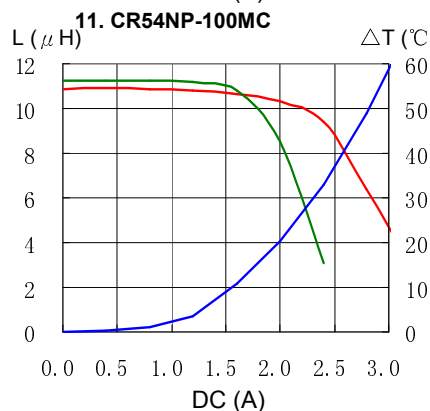
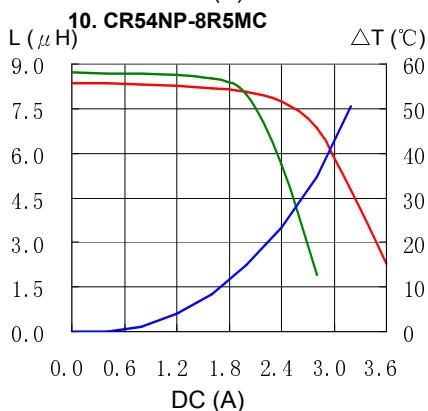
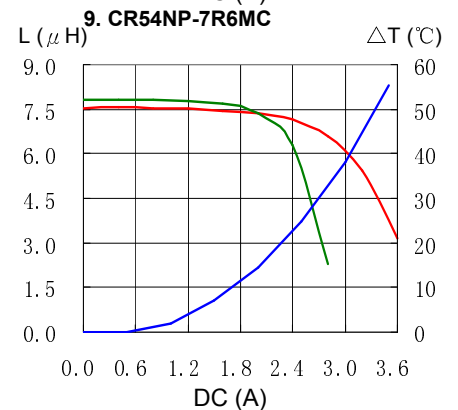
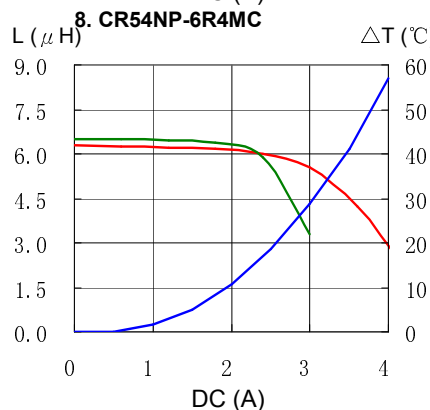
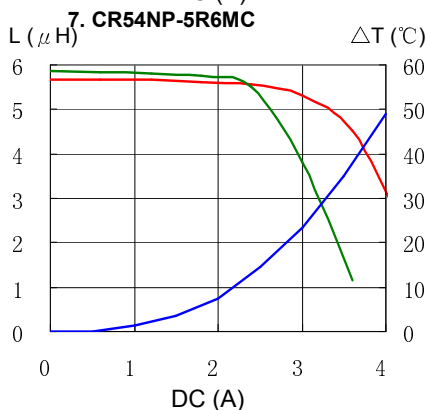
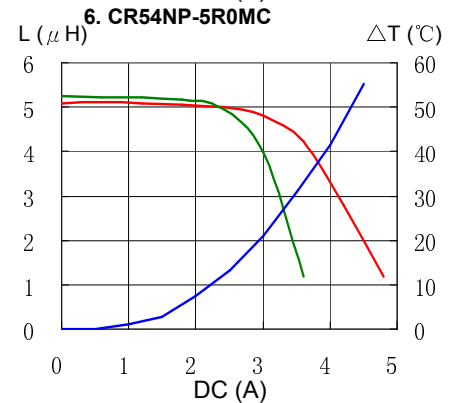
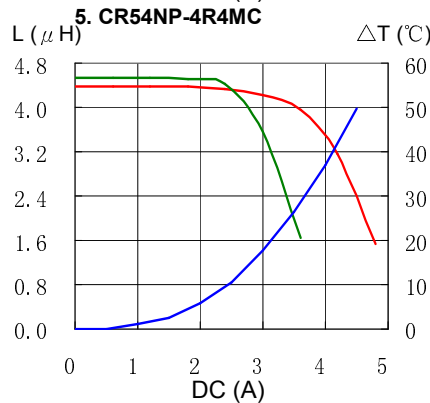
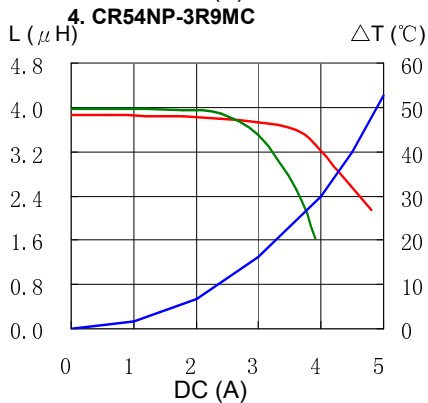
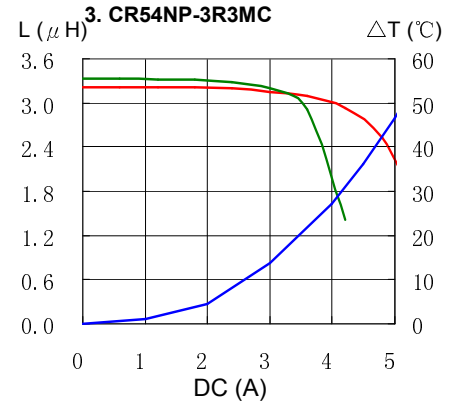
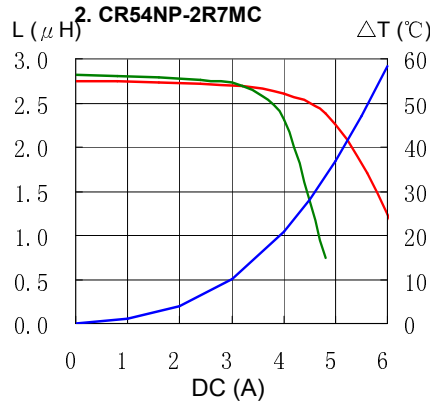
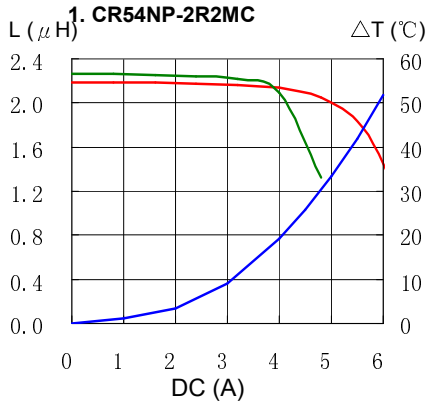
※2. Rated current: The D.C. current at which the inductance decreases to 90% of its initial value or when $\Delta t=40^\circ\text{C}$, whichever is lower ($T_a=20^\circ\text{C}$).

SMD Power Inductor CR54



Saturation Current & Temperature Rise Graph

— L (20°C) — L (100°C) — ΔT

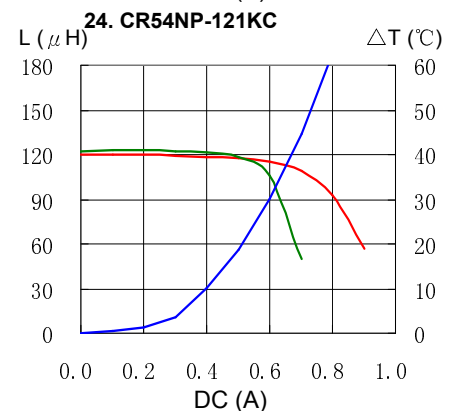
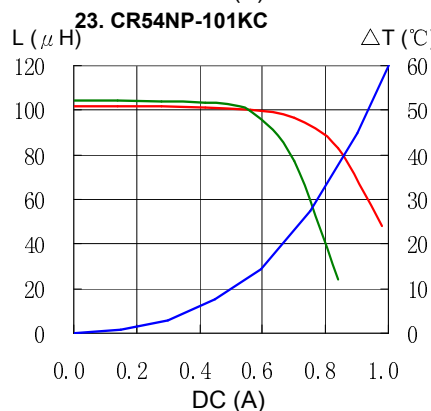
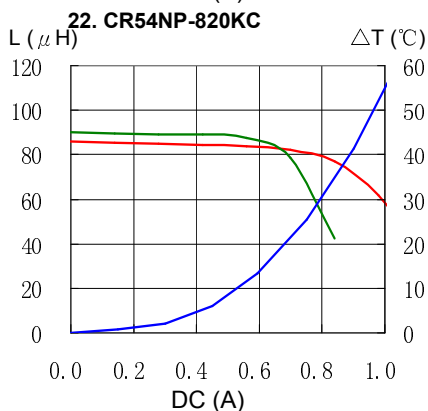
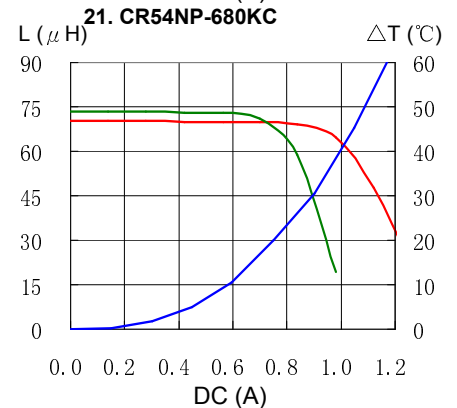
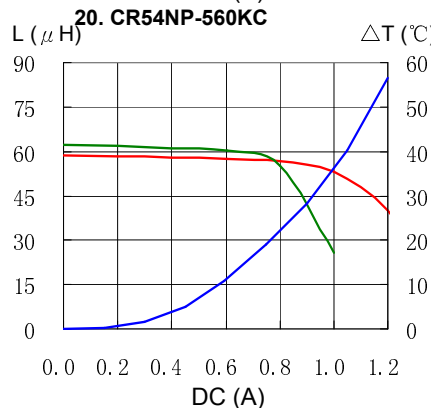
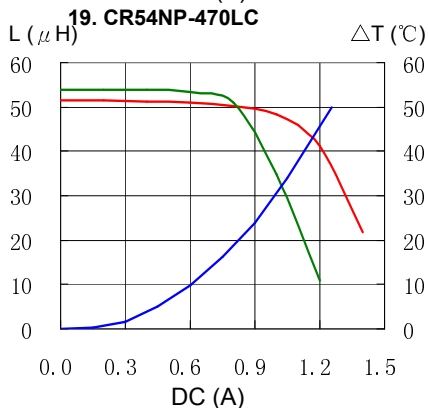
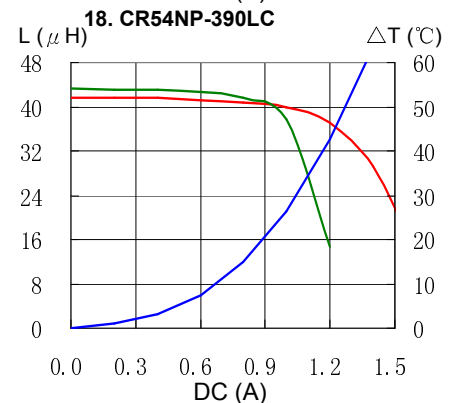
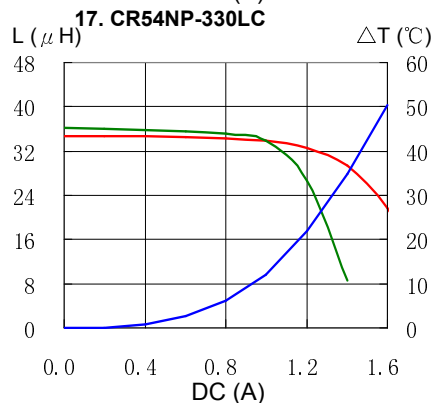
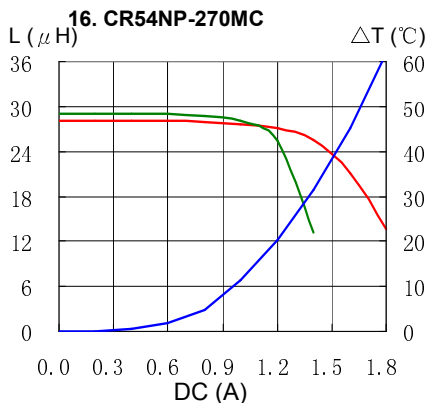
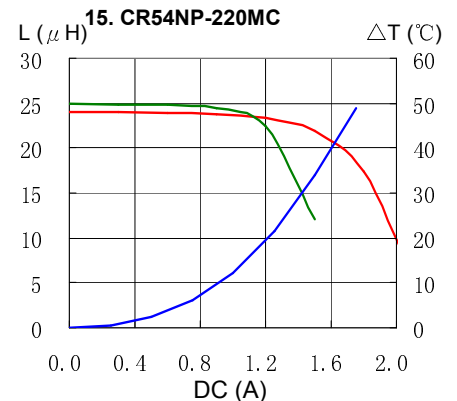
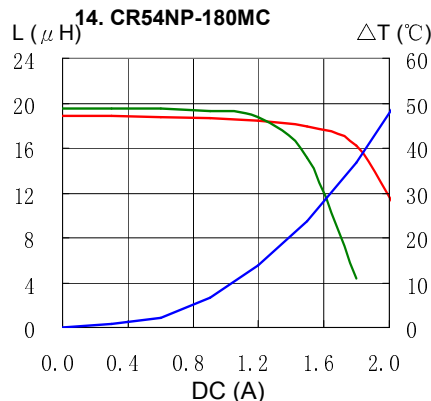
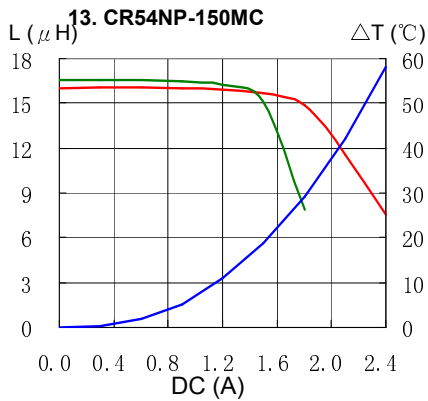


SMD Power Inductor CR54



Saturation Current & Temperature Rise Graph

— L (20°C) — L (100°C) — ΔT

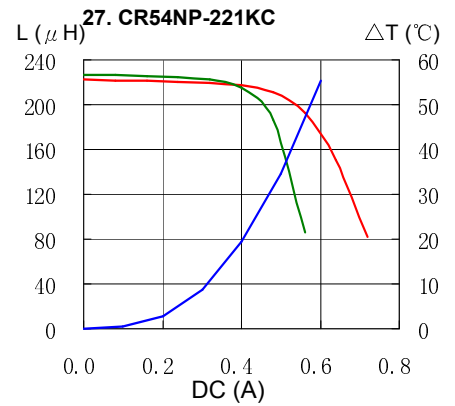
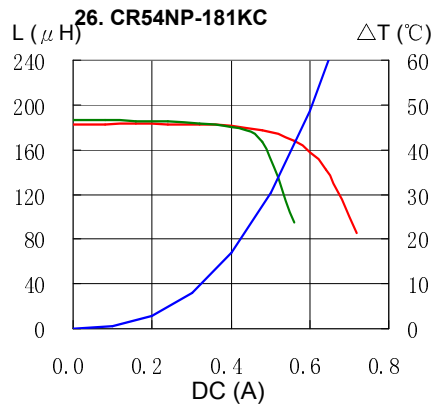
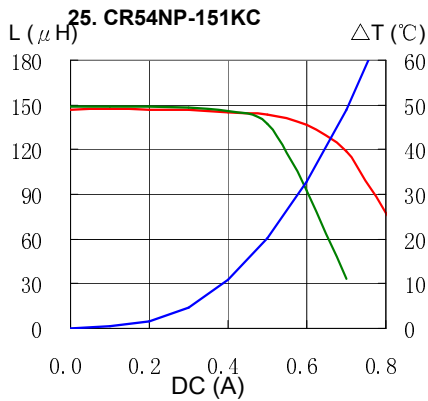


SMD Power Inductor CR54

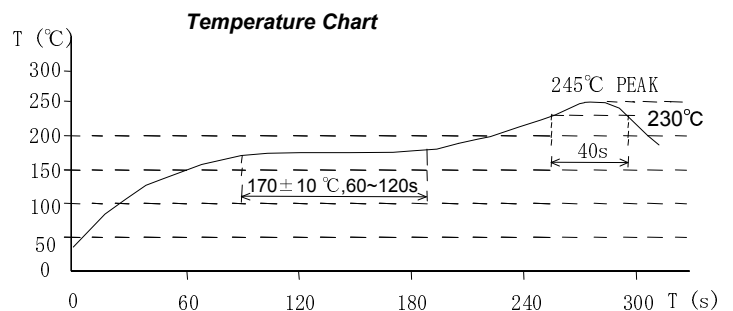
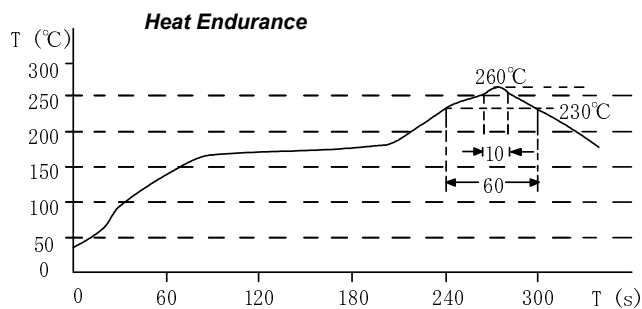


Saturation Current & Temperature Rise Graph

— L (20°C) — L (100°C) — ΔT



Solder Reflow Condition



Please refer to the sales offices on our website - <http://www.sumida.com>

Hong Kong
Tel.+852-2880-6781
FAX.+852-2565-9600
sales@hk.sumida.com

Saitama(Japan)
Tel.+81-48-691-7300
FAX.+81-48-691-7340
sales@jp.sumida.com

Chicago
Tel.+1-847-545-6700
FAX. +1-847-545-6720
sales@us.sumida.com

Shanghai
Tel.+86-21-5836-3299
FAX.+86-21-5836-3266
shanghai.sales@cn.sumida.com

Seoul
Tel.+82-2-6237-0777
FAX.+82-2-6237-0778
sales@kr.sumida.com

Oberzell
Tel.+49-8591-937-0
FAX. +49-8591-937-103
contact@eu.sumida.com

Shenzhen
Tel.+86-755-8291-0228
FAX.+86-755-8291-0338
shenzhen.sales@cn.sumida.com

Singapore
Tel.+65-6296-3388
FAX.+65-6841-4426
sales@sg.sumida.com

Neumarkt
Tel.+49-9181-4509-110
FAX. +49-9181-4509-310
infocomp@eu.sumida.com

Taipei
Tel.+886-2-8751-2737
FAX.+886-2-8751-2738
sales@tw.sumida.com

San Jose
Tel.+1-408-321-9660
FAX.+1-408-321-9308
sales@us.sumida.com

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Fixed Inductors](#) category:

Click to view products by [Sumida](#) manufacturer:

Other Similar products are found below :

[CR43NP-680KC](#) [CR54NP-820KC](#) [CR54NP-8R5MC](#) [CTX32CT-100](#) [70F224AI](#) [MGDQ4-00004-P](#) [MHL1ECTTP18NJ](#) [MHL1JCTTD12NJ](#)
[PE-51506NL](#) [PE-53601NL](#) [PE-53602NL](#) [PE-53630NL](#) [PE-53824SNLT](#) [PE-62892NL](#) [PE-92100NL](#) [PG0434.801NLT](#) [PG0936.113NLT](#)
[9310-16](#) [PM06-2N7](#) [PM06-39NJ](#) [A01TK](#) [1206CS-471XJ](#) [HC2-2R2TR](#) [HC2LP-R47-R](#) [HC3-2R2-R](#) [1206CS-151XG](#) [RCH664NP-140L](#)
[RCH664NP-4R7M](#) [RCH8011NP-221L](#) [RCP1317NP-332L](#) [RCP1317NP-391L](#) [RCR1010NP-470M](#) [RCR110DNP-331L](#) [DH2280-4R7M](#)
[DS1608C-106](#) [ASPI-4020HI-R10M-T](#) [B10TJ](#) [B82477P4333M](#) [B82498B3101J000](#) [B82498B3680J000](#) [ELJ-RE27NJF2](#) [1812CS-153XJ](#)
[1812CS-183XJ](#) [1812CS-223XJ](#) [1812LS-104XJ](#) [1812LS-105XJ](#) [1812LS-124XJ](#) [1812LS-154XJ](#) [1812LS-223XJ](#) [1812LS-224XJ](#)