

CDRR128NP-180MC Datasheet



DiGi Electronics Part Number	CDRR128NP-180MC-DG
Manufacturer	Sumida America Components Inc.
Manufacturer Product Number	CDRR128NP-180MC
Description	INDUCTOR
Detailed Description	18 μ H Shielded Drum Core, Wirewound Inductor 3.8 A 44mOhm Max Nonstandard

<https://www.DiGi-Electronics.com>



Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

DiGi is a global authorized distributor of electronic components.

Purchase and inquiry

Manufacturer Product Number:

CDRR128NP-180MC

Series:

CDRR128

Type:

Drum Core, Wirewound

Inductance:

18 μ H

Current Rating (Amps):

3.8 A

Shielding:

Shielded

Q @ Freq:

-

Ratings:

-

Inductance Frequency - Test:

100 kHz

Mounting Type:

Surface Mount

Supplier Device Package:

-

Height - Seated (Max):

0.335" (8.50mm)

Manufacturer:

Sumida America Components Inc.

Product Status:

Active

Material - Core:

Ferrite

Tolerance:

\pm 20%

Current - Saturation (Isat):

4.6A

DC Resistance (DCR):

44mOhm Max

Frequency - Self Resonant:

-

Operating Temperature:

-40°C ~ 125°C

Features:

-

Package / Case:

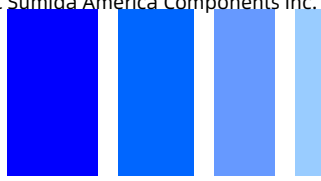
Nonstandard

Size / Dimension:

0.480" L x 0.480" W (12.20mm x 12.20mm)

SMD Power Inductor

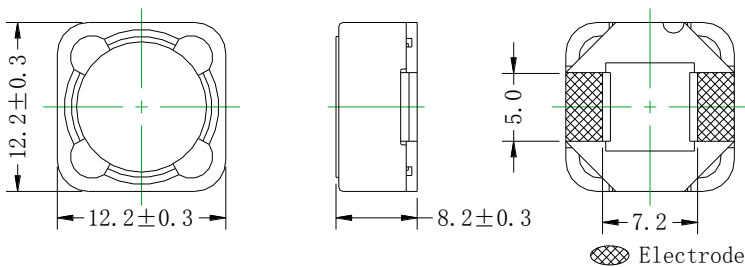
CDRR128



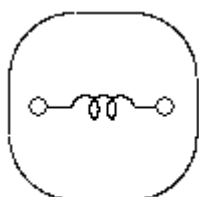
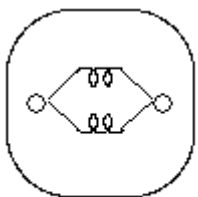
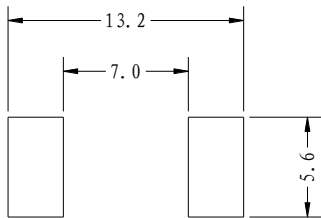
RoHS



Dimension - [mm]



Land pattern and Schematics - [mm]



Description

- Ferrite drum core construction.
- Magnetically shielded.
- L × W × H: 12.5 × 12.5 × 8.5 mm Max.
- Product weight: 4.2 g (Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.
- Qualification to AEC-Q200.

Environmental Data

- Operating temperature range: $-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$ (including coil's self temperature rise)
- Storage temperature range: $-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$
- Solder reflow temperature: 260°C peak.

Packaging

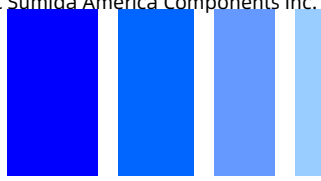
- Carrier tape and reel packaging.
- 13.0" diameter reel
- 300 pcs per reel

Applications

- For consumer electronics : DVD player, personal computer, LCD display, etc.
- For automotive: ABS, SRS airbag, HID/LED, car audio, car navigation, LCD display, etc.

SMD Power Inductor

CDRR128



Electrical Characteristics

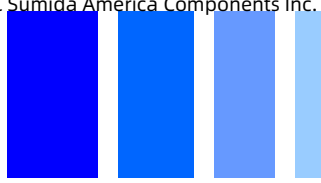
Part No.	Stamp	Inductance (μ H) [Within] ※1	D.C.R.(Ω) [Max.] (Typ.) (at 20°C)	Saturation current (A) ※2		Temperature rise Current (A) ※3
				(at 25°C)	(at 125°C)	
CDRR128NP-120MC	120	12 \pm 20%	36m(28.0m)	7.5(9.4)	5.9(7.3)	4.4(5.0)
CDRR128NP-150MC	150	15 \pm 20%	41m(33.0m)	6.6(8.3)	5.0(6.3)	4.2(4.8)
CDRR128NP-180MC	180	18 \pm 20%	44m(35.2m)	6.2(7.7)	4.6(5.7)	3.8(4.3)
CDRR128NP-220MC	220	22 \pm 20%	50m(40.3m)	5.3(6.6)	3.8(4.8)	3.6(4.2)
CDRR128NP-270MC	270	27 \pm 20%	65m(52.0m)	5.1(6.4)	3.7(4.6)	3.1(3.6)
CDRR128NP-330MC	330	33 \pm 20%	72m(57.4m)	4.9(6.1)	3.6(4.5)	3.0(3.4)
CDRR128NP-390MC	390	39 \pm 20%	79m(63.0m)	4.5(5.7)	3.4(4.3)	2.9(3.2)
CDRR128NP-470MC	470	47 \pm 20%	89m(71.0m)	3.8(4.7)	2.8(3.6)	2.8(3.2)
CDRR128NP-560MC	560	56 \pm 20%	103m(82.6m)	3.7(4.6)	2.7(3.4)	2.6(2.9)
CDRR128NP-680MC	680	68 \pm 20%	0.129(0.107)	3.4(4.2)	2.6(3.2)	2.2(2.5)
CDRR128NP-820MC	820	82 \pm 20%	0.155(0.129)	2.9(3.7)	2.1(2.7)	2.0(2.3)
CDRR128NP-101MC	101	100 \pm 20%	0.178(0.147)	2.6(3.3)	1.9(2.4)	1.9(2.1)
CDRR128NP-121MC	121	120 \pm 20%	0.208(0.173)	2.4(3.0)	1.7(2.2)	1.7(1.9)
CDRR128NP-151MC	151	150 \pm 20%	0.238(0.192)	2.2(2.8)	1.6(2.0)	1.6(1.8)
CDRR128NP-181MC	181	180 \pm 20%	0.301(0.25)	2.0(2.5)	1.5(1.9)	1.4(1.6)
CDRR128NP-221MC	221	220 \pm 20%	0.389(0.324)	1.9(2.4)	1.4(1.8)	1.2(1.4)
CDRR128NP-271MC	271	270 \pm 20%	0.487(0.406)	1.7(2.2)	1.3(1.6)	1.0(1.2)
CDRR128NP-331MC	331	330 \pm 20%	0.57(0.453)	1.6(2.0)	1.2(1.5)	0.97(1.1)
CDRR128NP-391MC	391	390 \pm 20%	0.71(0.58)	1.4(1.8)	1.1(1.4)	0.89(1.0)
CDRR128NP-471MC	471	470 \pm 20%	0.80(0.64)	1.3(1.6)	0.92(1.2)	0.88(1.0)
CDRR128NP-561MC	561	560 \pm 20%	0.96(0.793)	1.1(1.5)	0.89(1.1)	0.76(0.88)
CDRR128NP-681MC	681	680 \pm 20%	1.18(0.949)	1.0(1.3)	0.83(1.0)	0.76(0.87)
CDRR128NP-821MC	821	820 \pm 20%	1.48(1.23)	0.96(1.2)	0.72(0.90)	0.63(0.72)
CDRR128NP-102MC	102	1000 \pm 20%	1.82(1.52)	0.86(1.1)	0.68(0.85)	0.58(0.66)

※1. Measuring condition: at 100 kHz.

※2. Saturation current: The value of D.C. current when the inductance decreases to 75% of it's nominal value.

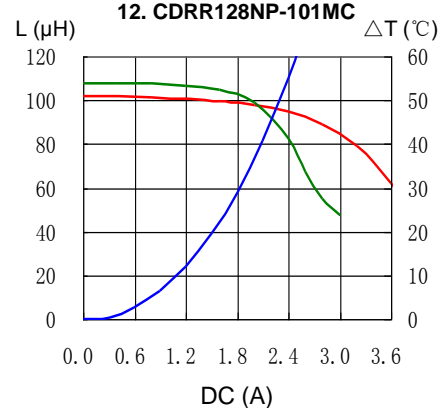
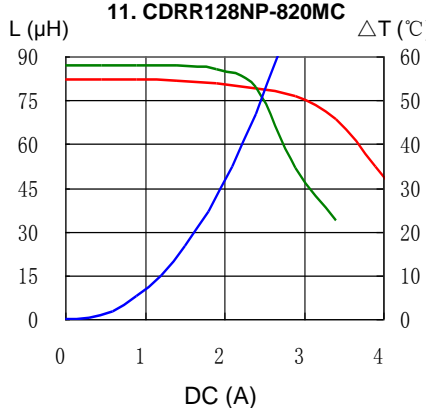
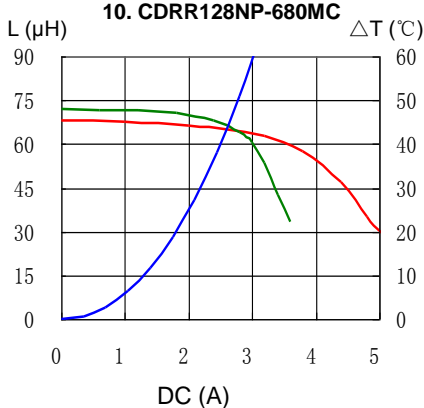
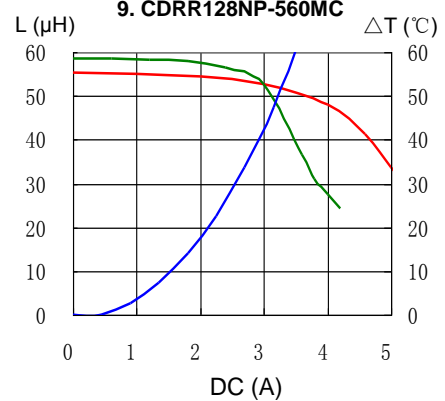
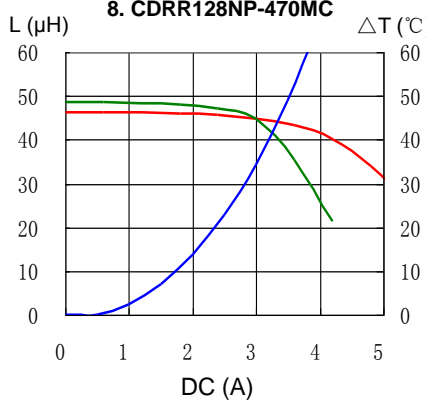
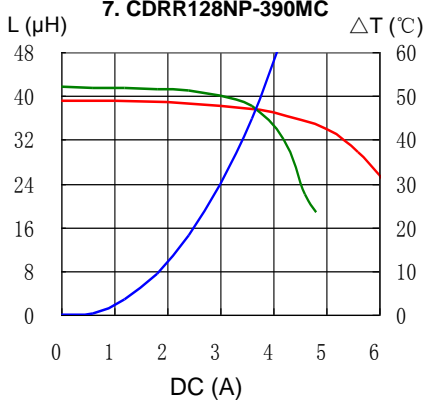
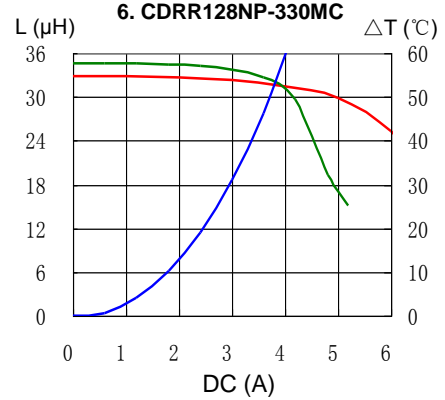
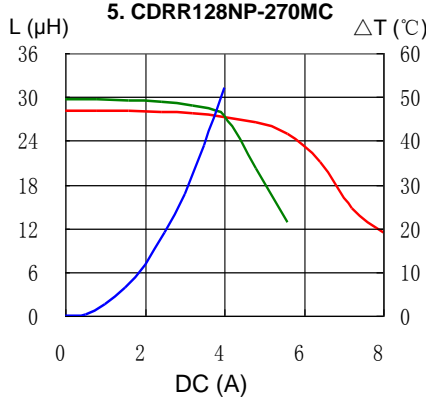
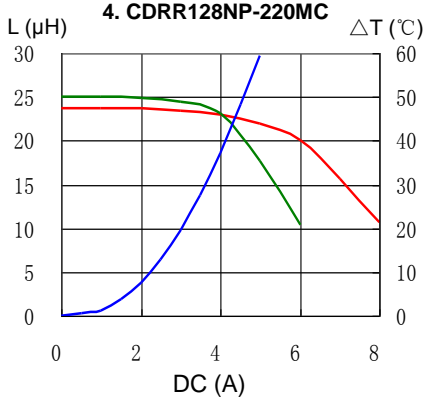
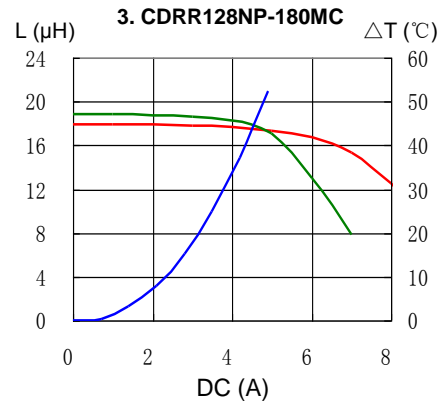
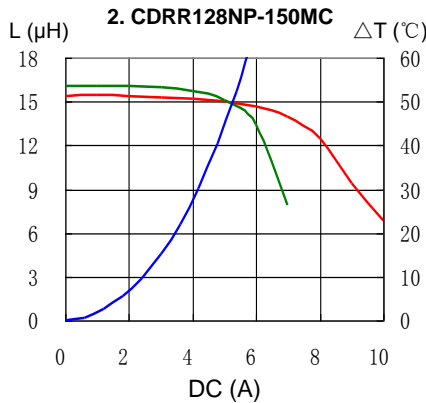
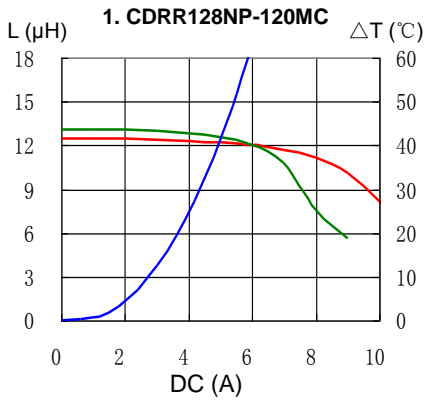
※3. Temperature rise current: The value of D.C. current when the temperature rise is $\Delta t=40^{\circ}\text{C}$ ($T_a=20^{\circ}\text{C}$).

SMD Power Inductor CDRR128

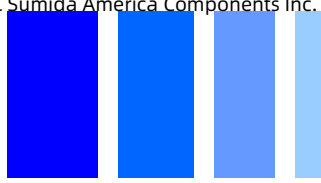


Saturation Current & Temperature Rise Graph

— L (25°C) — L (125°C) — ΔT

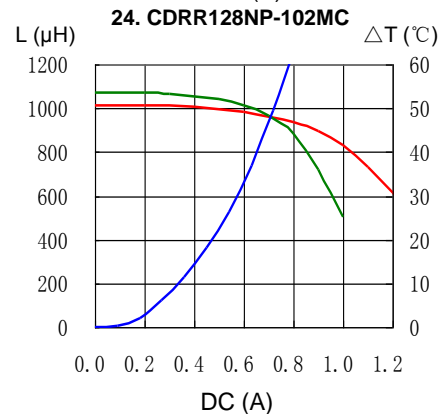
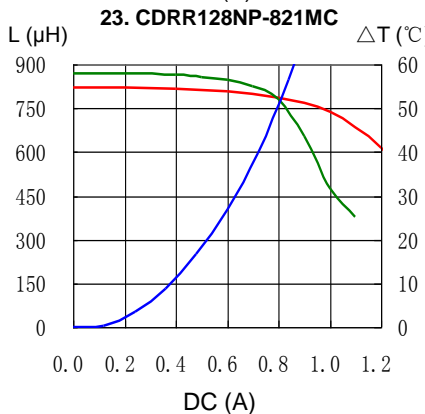
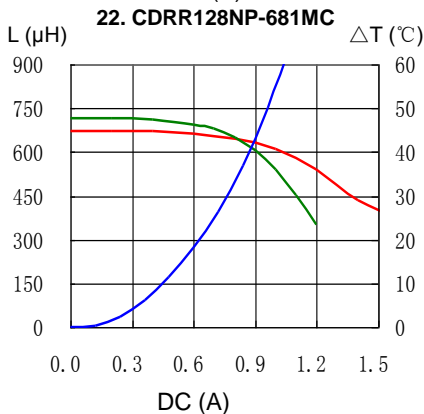
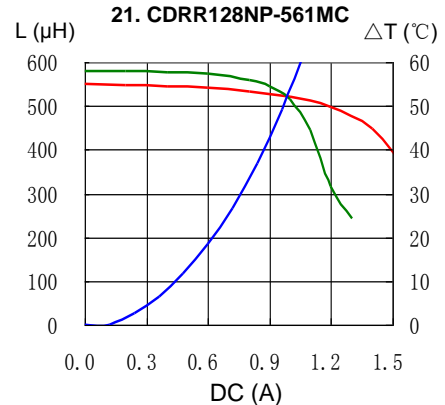
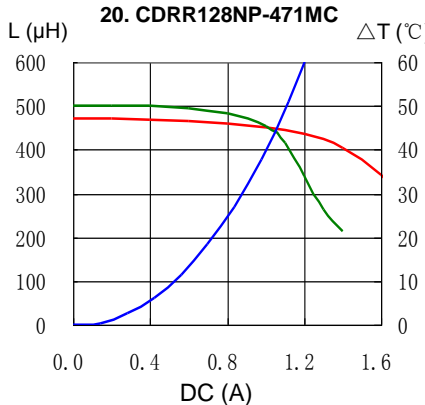
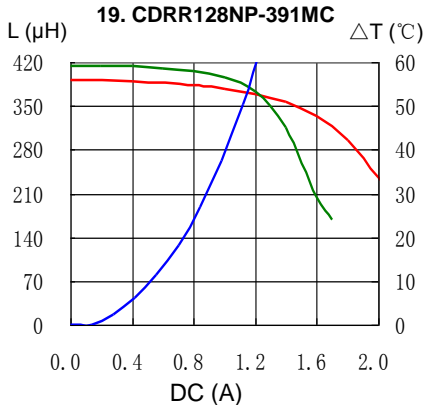
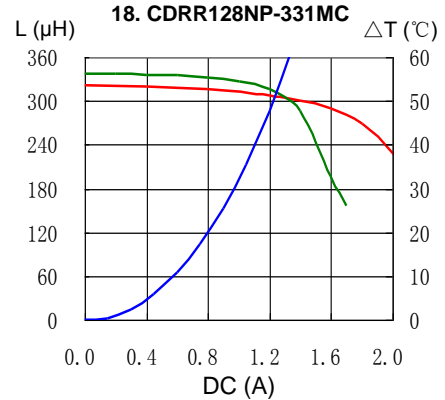
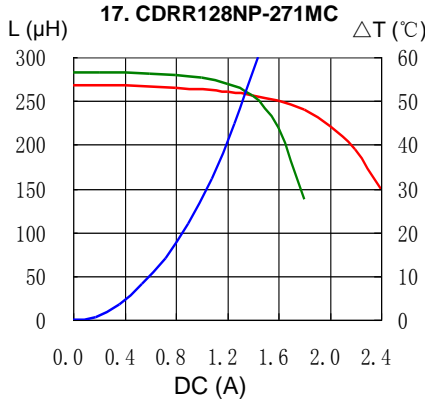
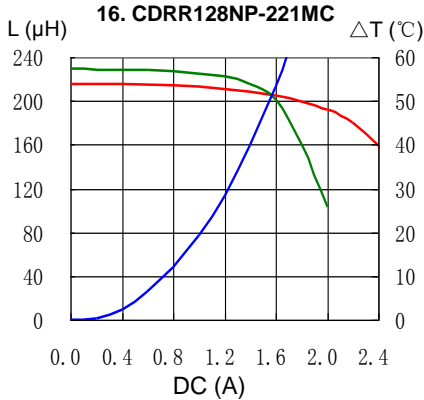
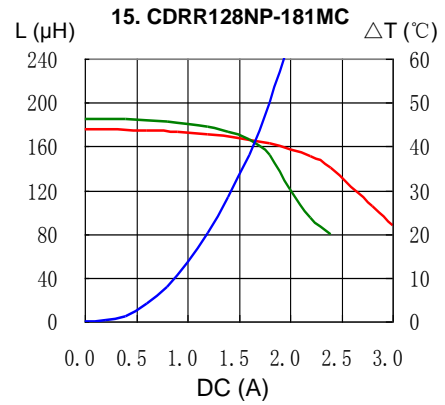
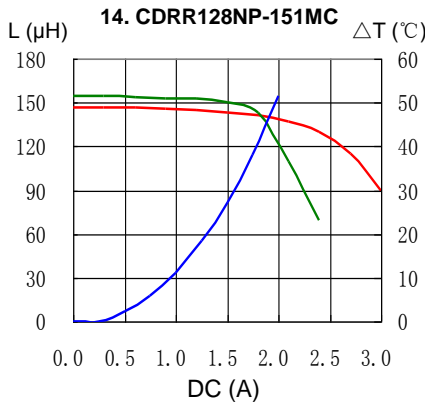
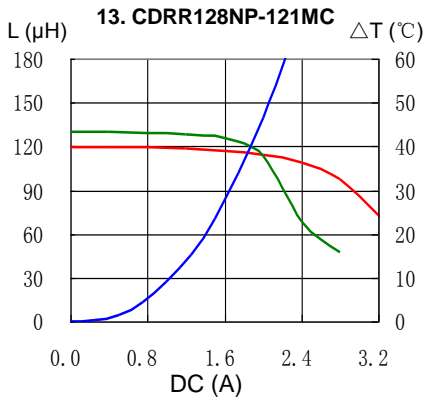


SMD Power Inductor CDRR128



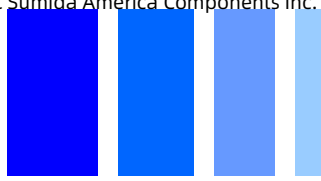
Saturation Current & Temperature Rise Graph

— L (25°C) — L (125°C) — ΔT



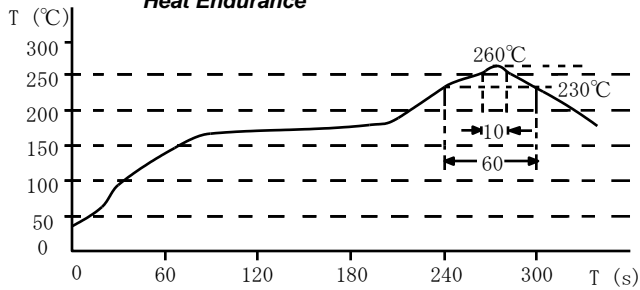
SMD Power Inductor

CDRR128

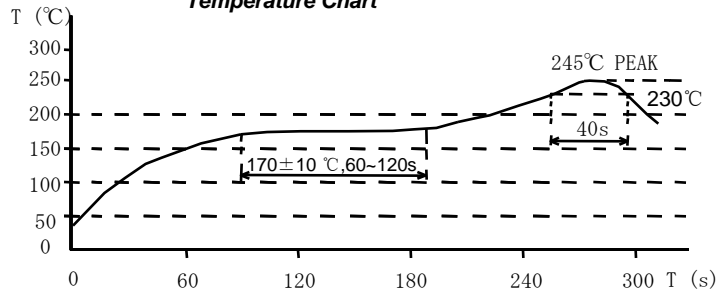


Solder Reflow Condition

Heat Endurance



Temperature Chart



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

Obernzell

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

OUR CERTIFICATE

DiGi provide top-quality products and perfect service for customer worldwide through standardization, technological innovation and continuous improvement. DiGi through third-party certification, we stricly control the quality of products and services. Welcome your RFQ to

Email: Info@DiGi-Electronics.com



Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

DiGi is a global authorized distributor of electronic components.