YAGEO

Product Selection Tables 2005

SMD Resistors

Yageo brand

YAGEO

Table of Contents

General purpose, 0201 - 0805

R-Chip General purpose								
General purpose								
Size:inch(mm)	0201 (0603)		0402 (1005)		0603 (1608)		0805 (2012)	
Power rating @ 70°C	1/20W		1/16W		1/10W		1/8W	
Tolerance	+-5%	+-1%	+-5%	+-1%	+-5%	+-1%	+-5%	+-1%
Resistance Range	E24	E24/E96	E24	E24/E96	E24	E24/E96	E24	E24/E96
Jumper								
1 Ω								
1.5 Ω								
2.2 Ω								
3.3 Ω								
4.7 Ω								
6.8 Ω								
10 Ω								
15 Ω								
22 Ω								
33 Ω								
47 Ω								
68 Ω								
100 Ω								
150 Ω								
220 Ω								
330 Ω								
470 Ω								
680 Ω								
1 kΩ								
1.5 kΩ								
2.2 kΩ								
3.3 kΩ								
4.7 kΩ								
6.8 kΩ								
10 kΩ								
15 kΩ								
22 kΩ								
33 kΩ								
47 kΩ								
68 kΩ								
100 kΩ								
150 kΩ								
220 kΩ								
330 kΩ								
470 kΩ								
680 kΩ								
1 MΩ								
1.5 MΩ								
2.2 MΩ								
3.3 MΩ								
4.7 MΩ								
6.8 MΩ								
10 MΩ								
15 MΩ								
22 MΩ								
Remark	1. Zero Ohm Jumper<0.05 Ohm 2.22M to 100M Ohm is on request							

General purpose, 1206 - 2512

R-Chip General purpose										
General purpose										
Size:inch(mm)	1206 (3216)		1210 (3225)		1218 (3248)		2010 (5025)		2512 (6432)	
Power rating @ 70°C	1/4W		1/2W		1W		3/4W		1W	
Tolerance	+-5%	+-1%	+-5%	+-1%	+-5%	+-1%	+-5%	+-1%	+-5%	+-1%
Resistance Range	E24	E24/E96	E24	E24/E96	E24	E24/E96	E24	E24/E96	E24	E24/E96
Jumper										
1 Ω										
1.5 Ω										
2.2 Ω										
3.3 Ω										
4.7 Ω										
6.8 Ω										
10 Ω										
15 Ω										
22 Ω										
33 Ω										
47 Ω										
68 Ω										
100 Ω										
150 Ω										
220 Ω										
330 Ω										
470 Ω										
680 Ω										
1 kΩ										
1.5 kΩ										
2.2 kΩ										
3.3 kΩ										
4.7 kΩ										
6.8 kΩ										
10 kΩ										
15 kΩ										
22 kΩ										
33 kΩ										
47 kΩ										
68 kΩ										
100 kΩ										
150 kΩ										
220 kΩ										
330 kΩ										
470 kΩ										
680 kΩ										
1 MΩ										
1.5 MΩ										
2.2 MΩ										
3.3 MΩ										
4.7 MΩ										
6.8 MΩ										
10 MΩ										
15 MΩ										
22 MΩ										
Remark	1.Zero Ohm Jumper<0.05 Ohm 2.22M to 100M Ohm is on request									

High precision - high stability, 0201 - 0603

R-Chip High precision - high stability												
High precision - high stability												
Size:inch(mm)	0201 (0603)				0402 (1005)				0603 (1608)			
Operation Mode	Precision	Standard		Power	Precision	Standard		Power	Precision	Standard		Power
Power rating @ 70°C	1/64W	1/20W		1/16W	1/64W	1/16W		1/10W	1/32W	1/10W		1/8W
Operating Temp range (°C)	-10 to+85	-55 to+125		-55 to+155	-10 to+85	-55 to+125		-55 to+155	-10 to+85	-55 to+125		-55 to+155
Tolerance	+-1%	+-0.5%	+-0.25%	+-0.1%	+-1%	+-0.5%	+-0.25%	+-0.1%	+-1%	+-0.5%	+-0.25%	+-0.1%
Resistance Range	E24/E96	E24/E96	E24/E96	E24/E96	E24/E96	E24/E96	E24/E96	E24/E96	E24/E96	E24/E96	E24/E96	E24/E96
3 Ω												
3.3 Ω												
4.7 Ω												
6.8 Ω												
10 Ω												
15 Ω												
22 Ω												
33 Ω												
47 Ω												
68 Ω												
100 Ω												
150 Ω												
220 Ω												
330 Ω												
470 Ω												
680 Ω												
1 kΩ												
1.5 kΩ												
2.2 kΩ												
3.3 kΩ												
4.7 kΩ												
6.8 kΩ												
10 kΩ												
15 kΩ												
22 kΩ												
33 kΩ												
47 kΩ												
68 kΩ												
100 kΩ												
150 kΩ												
220 kΩ												
330 kΩ												
470 kΩ												
680 kΩ												
Remark	Jumper & Resistance range is lower to 1 Ohm and upper to 2M Ohm(depend on size) on request											

Note: Value in "Resistance" means the minimum one.
Note: Resistance E192; special value on request
Note: TCR=±10ppm/°C; ±15ppm/°C on Request
Note: Tolerance=±0.01%; ±0.05% on Request
Note: Power mode RT0603 on request

High precision - high stability, 0805 - 1210

R-Chip High precision - high stability												
High precision - high stability												
Size:inch(mm)	0805 (2012)				1206 (3216)				1210 (3225)			
Operation Mode	Precision	Standard		Power	Precision	Standard		Power	Precision	Standard		Power
Power rating @ 70°C	1/20W	1/8W		1/5W	1/10W	1/8W		1/4W	1/8W	1/4W		2/5W
Operating Temp range (°C)	-10 to+85	-55 to+125		-55 to+155	-10 to+85	-55 to+125		-55 to+155	-10 to+85	-55 to+125		-55 to+155
Tolerance	+-1%	+-0.5%	+-0.25%	+-0.1%	+-1%	+-0.5%	+-0.25%	+-0.1%	+-1%	+-0.5%	+-0.25%	+-0.1%
Resistance Range	E24/E96	E24/E96	E24/E96	E24/E96	E24/E96	E24/E96	E24/E96	E24/E96	E24/E96	E24/E96	E24/E96	E24/E96
1 Ω												
1.5 Ω												
2.2 Ω												
3.3 Ω												
4.7 Ω												
6.8 Ω												
10 Ω												
15 Ω												
22 Ω												
33 Ω												
47 Ω												
68 Ω												
100 Ω												
150 Ω												
220 Ω												
330 Ω												
470 Ω												
680 Ω												
1 kΩ												
1.5 kΩ												
2.2 kΩ												
3.3 kΩ												
4.7 kΩ												
6.8 kΩ												
10 kΩ												
15 kΩ												
22 kΩ												
33 kΩ												
47 kΩ												
68 kΩ												
100 kΩ												
150 kΩ												
220 kΩ												
330 kΩ												
470 kΩ												
680 kΩ												
1 MΩ												
1.5 MΩ												
Remark	1. Jumper; Resistance E192; special value on request 2. TCR=±10ppm/°C; ±15ppm/°C on Request 3.Tolerance=±0.01%; ±0.05% on Request 4. Power mode RT0805, 1206 on request											

High precision - high stability, 2010 - 2512

R-Chip High precision - high stability								
High precision - high stability								
Size:inch(mm)	2010 (5025)				2512 (6432)			
Operation Mode	Standard		Power		Standard		Power	
Power rating @ 70°C	1/2W		3/4W		3/4W		1W	
Operation Temp range (°C)	-55°C to+125°C		-55°C to+155°C		-55°C to+125°C		-55°C to+155°C	
Tolerance	+-1%	+-0.5%	+-0.25%	+-0.1%	+-1%	+-0.5%	+-0.25%	+-0.1%
Resistance Range	E24/E96	E24/E96	E24/E96	E24/E96	E24/E96	E24/E96	E24/E96	E24/E96
10 Ω								
15 Ω								
22 Ω								
33 Ω								
47 Ω								
68 Ω								
100 Ω								
150 Ω								
220 Ω								
330 Ω								
470 Ω								
680 Ω								
1 kΩ								
1.5 kΩ								
2.2 kΩ								
3.3 kΩ								
4.7 kΩ								
6.8 kΩ								
10 kΩ								
15 kΩ								
22 kΩ								
33 kΩ								
47 kΩ								
68 kΩ								
100 kΩ								
150 kΩ								
220 kΩ								
330 kΩ								
470 kΩ								
680 kΩ								
1 MΩ								
Remark	Jumper; Resistance E192; special value on request							

Note: Value in "Resistance" means the minimum one.

Note: TCR=±10ppm/°C; ±15ppm/°C on Request

Note: Tolerance=±0.01%; ±0.05% on Request

General purpose thin film, 0201-2512

R-Chip General purpose thin film								
General purpose thin film								
Tolerance	+-1%							
Temperature Coefficient of Resistance	+-50 ppm/`C							
Size:inch(mm)	0201 (0603)	0402 (1005)	0603 (1608)	0805 (2012)	1206 (3216)	1210 (3225)	2010 (5025)	2512 (6432)
Power rating @ 70°C	1/20W	1/16W	1/16W	1/10W	1/8W	1/4W	1/2W	3/4W
Resistance Range	E24/E96	E24/E96	E24/E96	E24/E96	E24/E96	E24/E96	E24/E96	E24/E96
1 Ω								
1.5 Ω								
2.2 Ω								
3.3 Ω								
4.7 Ω								
6.8 Ω								
10 Ω								
15 Ω								
22 Ω								
33 Ω								
47 Ω								
68 Ω								
100 Ω								
150 Ω								
220 Ω								
330 Ω								
470 Ω								
680 Ω								
1 kΩ								
1.5 kΩ								
2.2 kΩ								
3.3 kΩ								
4.7 kΩ								
6.8 kΩ								
10 kΩ								
15 kΩ								
22 kΩ								
33 kΩ								
47 kΩ								
68 kΩ								
100 kΩ								
150 kΩ								
220 kΩ								
330 kΩ								
470 kΩ								
680 kΩ								
1 MΩ								
1.5 MΩ								
Remark								

Note: Value in "Resistance" means the minimum one.

Note: Resistance E192; special value on request

Low ohmic, 0402 - 1206

R-Chip Low Ohmic								
Low Ohmic								
Size:inch(mm)	0402 (1005)		0603 (1608)		0805 (2012)		1206 (3216)	
Power rating @ 70°C	1/16W		1/10W		1/8W		1/4W	
Tolerance	+-5%	+-1%	+-5%	+-1%	+-5%	+-1%	+-5%	+-1%
Resistance Range	E24	E24	E24	E24	E24	E24	E24	E24
0.01 Ω								
0.011 Ω								
0.012 Ω								
0.013 Ω								
0.015 Ω								
0.016 Ω								
0.018 Ω								
0.02 Ω								
0.022 Ω								
0.024 Ω								
0.027 Ω								
0.03 Ω								
0.033 Ω								
0.036 Ω								
0.039 Ω								
0.043 Ω								
0.047 Ω								
0.051 Ω								
0.056 Ω								
0.062 Ω								
0.068 Ω								
0.075 Ω								
0.082 Ω								
0.091 Ω								
0.1 Ω								
0.11 Ω								
0.12 Ω								
0.13 Ω								
0.15 Ω								
0.16 Ω								
0.18 Ω								
0.2 Ω								
0.22 Ω								
0.24 Ω								
0.27 Ω								
0.3 Ω								
0.33 Ω								
0.36 Ω								
0.39 Ω								
0.43 Ω								
0.47 Ω								
0.51 Ω								
0.56 Ω								
0.62 Ω								
0.68 Ω								
0.75 Ω								
0.82 Ω								
0.91 Ω								
Remark	1.50mOhm ~ 100mOhm on request for 0402 2.E48/E96 on request							

Low ohmic, 2010 - 2512

R-Chip Low Ohmic								
R-Chip Low Ohmic								
Size:inch(mm)	1210 (3225)		1218 (3248)		2010 (5025)		2512 (6432)	
Power rating @ 70°C	1/2W		1W		3/4W		1W	
Tolerance	+-5%	+-1%	+-5%	+-1%	+-5%	+-1%	+-5%	+-1%
Resistance Range	E24	E24	E24	E24	E24	E24	E24	E24
0.01 Ω								
0.011 Ω								
0.012 Ω								
0.013 Ω								
0.015 Ω								
0.016 Ω								
0.018 Ω								
0.02 Ω								
0.022 Ω								
0.024 Ω								
0.027 Ω								
0.03 Ω								
0.033 Ω								
0.036 Ω								
0.039 Ω								
0.043 Ω								
0.047 Ω								
0.051 Ω								
0.056 Ω								
0.062 Ω								
0.068 Ω								
0.075 Ω								
0.082 Ω								
0.091 Ω								
0.1 Ω								
0.11 Ω								
0.12 Ω								
0.13 Ω								
0.15 Ω								
0.16 Ω								
0.18 Ω								
0.2 Ω								
0.22 Ω								
0.24 Ω								
0.27 Ω								
0.3 Ω								
0.33 Ω								
0.36 Ω								
0.39 Ω								
0.43 Ω								
0.47 Ω								
0.51 Ω								
0.56 Ω								
0.62 Ω								
0.68 Ω								
0.75 Ω								
0.82 Ω								
0.91 Ω								
Remark	E48/E96 on request							

Trimmable, 0805

R-Chip Trimmable		
Trimmable		
Size:inch(mm)	0805 (2012)	
Power rating @ 70°C	1/8W	
Tolerance	0/-20% (Trimmable)	0/-30% (Trimmable)
Resistance Range	E24	E24
1 Ω		
1.5 Ω		
2.2 Ω		
3.3 Ω		
4.7 Ω		
6.8 Ω		
10 Ω		
15 Ω		
22 Ω		
33 Ω		
47 Ω		
68 Ω		
100 Ω		
150 Ω		
220 Ω		
330 Ω		
470 Ω		
680 Ω		
1 kΩ		
1.5 kΩ		
2.2 kΩ		
3.3 kΩ		
4.7 kΩ		
6.8 kΩ		
10 kΩ		
15 kΩ		
22 kΩ		
33 kΩ		
47 kΩ		
68 kΩ		
100 kΩ		
150 kΩ		
220 kΩ		
330 kΩ		
470 kΩ		
680 kΩ		
1 MΩ		
1.5 MΩ		
2.2 MΩ		
3.3 MΩ		
4.7 MΩ		
6.8 MΩ		
10 MΩ		
Remark		

Note: Value in "Resistance" means the minimum one.

Arrays, convex and concave

R-Chip Arrays										
Arrays										
Size:inch(mm)	2 x 0402 (1 x 1 mm)		4 x 0402 (2 x 1 mm)		8 x 0402 (4.0 x 1.6 mm)		4 x 0603 (3.2 x 1.6 mm)			4 x 1206 (5.2 x 3.1 mm)
Power rating @ 70°C	1/16W		1/16W		1/16W		1/16W			1/8W
Tolerance	+-5%	+-1%	+-5%	+-1%	+-5%	+-1%	+-5%	+-1%	+-5%	+-5%
Type	R-Array/R-Network (convex)	R-Array/R-Network (convex)	R-Array/R-Network (convex)	R-Array/R-Network (convex)	R-Array/R-Network (convex)	R-Array/R-Network (convex)	R-Array/R-Network (convex)	R-Array/R-Network (convex)	R-Array/R-Network (concave)	R-Array/R-Network (convex)
Resistance Range	E24	E24/E96	E24	E24/E96	E24	E24/E96	E24	E24/E96	E24	E24
Jumper										
10 Ω										
15 Ω										
22 Ω										
33 Ω										
47 Ω										
68 Ω										
100 Ω										
150 Ω										
220 Ω										
330 Ω										
470 Ω										
680 Ω										
1 kΩ										
1.5 kΩ										
2.2 kΩ										
3.3 kΩ										
4.7 kΩ										
6.8 kΩ										
10 kΩ										
15 kΩ										
22 kΩ										
33 kΩ										
47 kΩ										
68 kΩ										
100 kΩ										
150 kΩ										
220 kΩ										
330 kΩ										
470 kΩ										
680 kΩ										
1 MΩ										
Remark										

Note: Zero Ohm Jumper<0.05 Ohm

Note: Value in "Resistance" means the minimum one.

Note: 4*0603 (Concave) 1% is on request

Note: 4*1206 (Convex) 1% is on request

Network

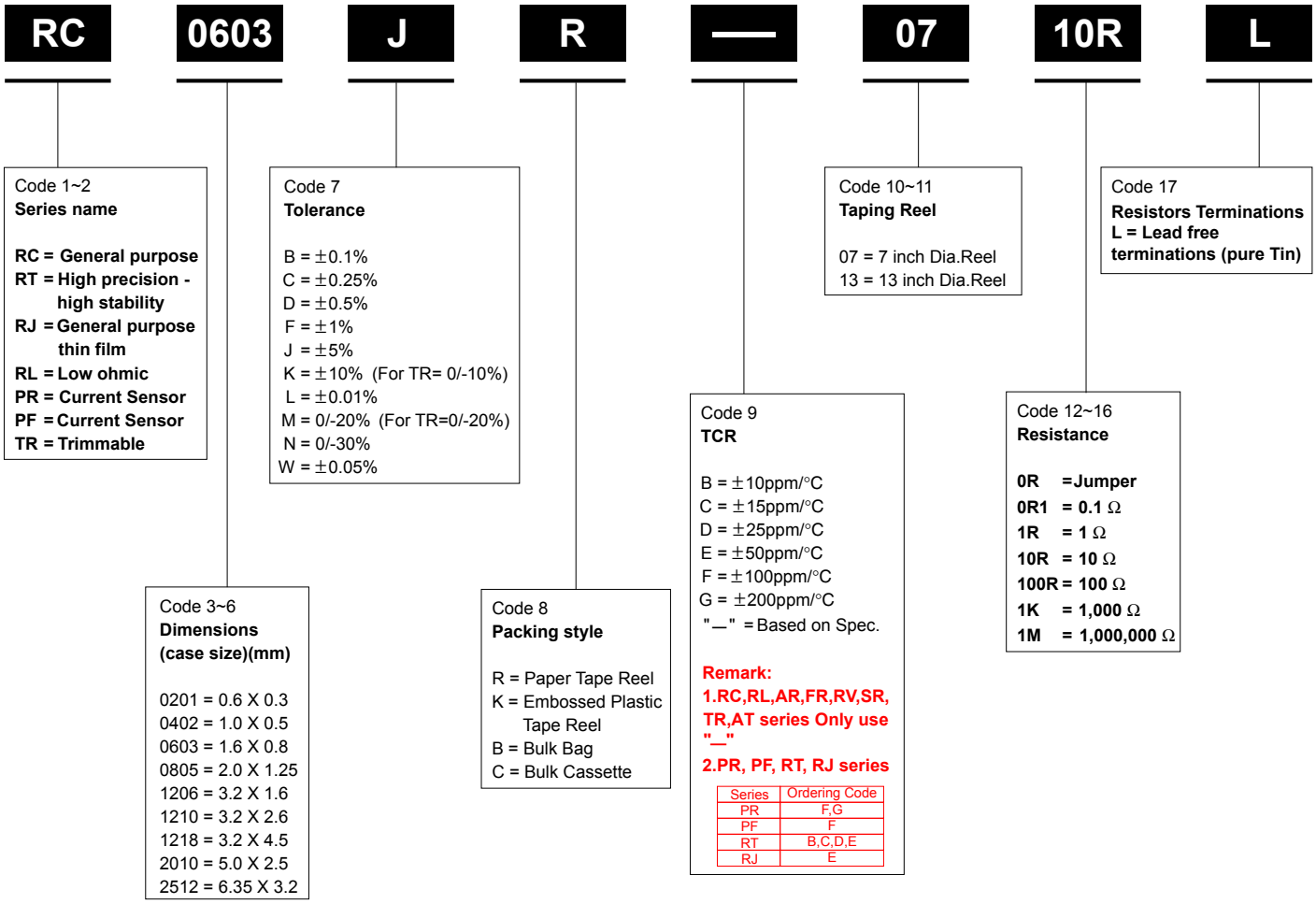
R-Chip Network			
Network			
Size:inch(mm)	0612 (1632)	1225 (3264)	
Power rating @ 70°C	1/32W	1/16W	
Tolerance	+-5%	+-5%	
Type	T-Type 10 Pin PIN 5 and PIN 10 no resistance	T-Type 10 Pin PIN 5 and PIN 10 no resistance	L-Type 10 Pin PIN 1 and PIN 6 no resistance
Resistance Range	E24	E24	E24
10 Ω			
15 Ω			
22 Ω			
33 Ω			
47 Ω			
68 Ω			
100 Ω			
150 Ω			
220 Ω			
330 Ω			
470 Ω			
680 Ω			
1 kΩ			
1.5 kΩ			
2.2 kΩ			
3.3 kΩ			
4.7 kΩ			
6.8 kΩ			
10 kΩ			
15 kΩ			
22 kΩ			
33 kΩ			
47 kΩ			
68 kΩ			
100 kΩ			
150 kΩ			
220 kΩ			
330 kΩ			
Remark	8R-Network, Convex terminations		

Note: Zero Ohm Jumper<0.05 Ohm

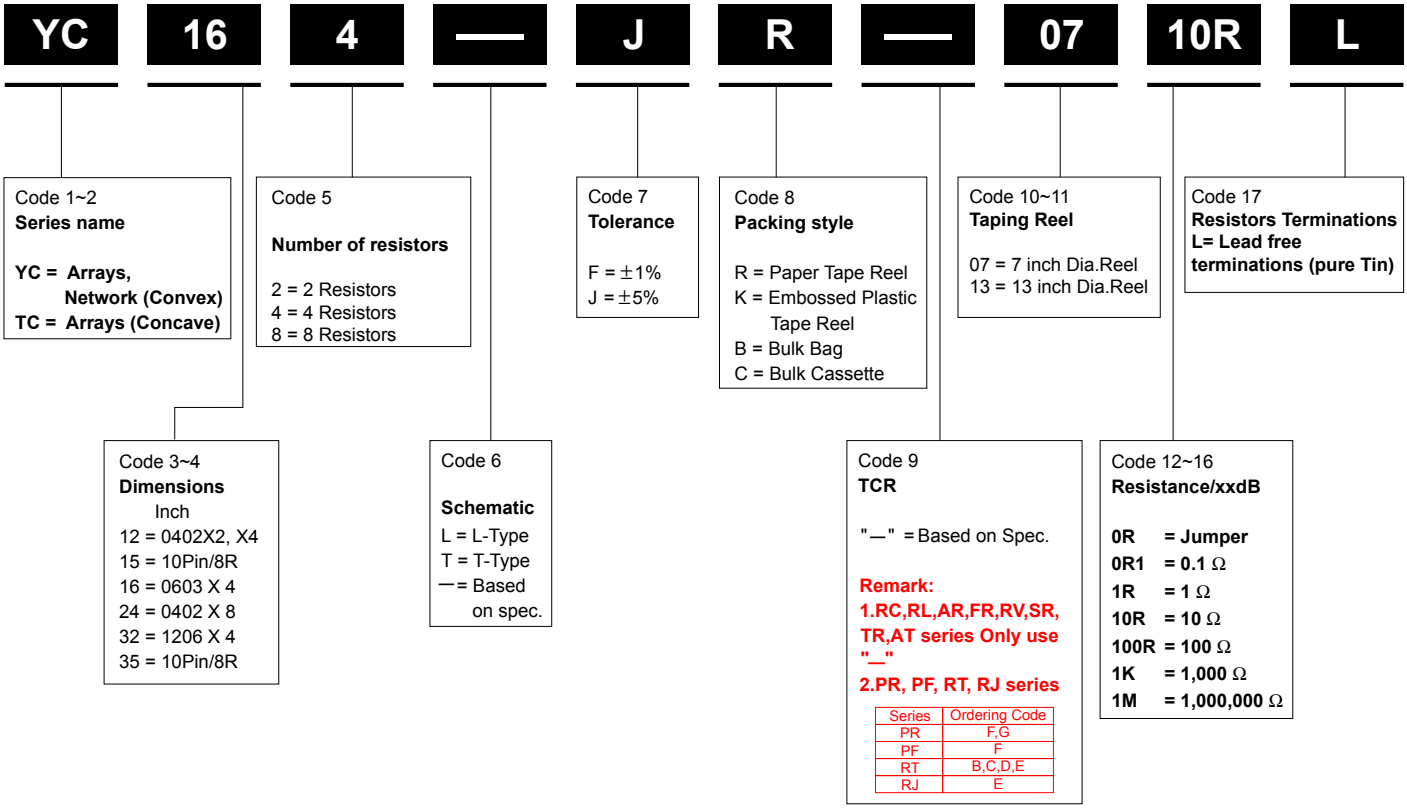
Note: Value in "Resistance" means the minimum one.

Current sensors - Low TCR

Current sensors - Low TCR		
Current sensors		
Size:inch(mm)	2512 (6432)	
Power rating @ 70°C	1W	
Tolerance	+-5%	+-1%
0.0010 Ω		
0.0020 Ω		
0.0030 Ω		
0.0040 Ω		
0.0050 Ω		
0.0060 Ω		
0.0070 Ω		
0.0080 Ω		
0.0090 Ω		
0.01 Ω		
0.02 Ω		
0.03 Ω		
0.04 Ω		
0.06 Ω		
0.08 Ω		
0.1 Ω		
0.2 Ω		
Remark		



Ordering Information - Array, Network



Packing Quantities					
Size Code	Tape Width	180 mm / 7"		330 mm / 13"	
		Paper	Embossed	Paper	Embossed
0201	8 mm	10 000	---	50 000	---
0402	8 mm	10 000	---	50 000	---
0603	8 mm	5 000	---	20 000	---
0805	8 mm	5 000	---	20 000	---
1206	8 mm	5 000	---	20 000	---
1210	8 mm	5 000	---	20 000	---
1218	12 mm	---	4 000	---	---
2010	12 mm	---	4 000	---	---
2512	12 mm	---	4 000	---	---
YC122 (2x0402)	8 mm	10 000	---	50 000	---
YC124 (4x0402)	8 mm	10 000	---	40 000	---
YC/TC16 (4x0603)	8 mm	5 000	---	20 000	---
YC15 (0616)	8 mm	5 000	---	20 000	---
YC24 (1220)	12 mm	5 000	---	---	---
YC32/35 (1220/1225)	12 mm	---	4 000	---	---

Contact information

Asia

Yageo Taiwan

Tel. +886 (0)2 2917 7555

Fax. +886 (0)2 2917 4286

Yageo China, Dongguan

Tel. +86 769 772 0275

Fax. +86 769 791 0053

Yageo China, Suzhou

Tel. +86 512 825 5568

Fax. +86 512 825 5386

Yageo China, Beijing

Tel. +86 10 851 20810

Fax. +86 10 851 20200

Yageo Hong Kong

Tel. +852 2342 6833

Fax. +852 2342 6588

Yageo Japan

Tel. +81 3 5833 3331

Fax. +81 3 5833 3116

Yageo Korea

Tel. +82 31 712 4797

Fax. + 82 31 712 5866

Yageo Malaysia, Penang

Tel. +60 4 397 3317

Fax. +60 4 397 3272

Yageo Malaysia, Kuala Lumpur

Tel. +60 3 5882 2854

Fax. +60 3 5882 8700

Yageo Singapore

Tel. +65-6244 7800

Fax. +65-6244 4943

Europe

Yageo Benelux

Tel. +31 475 385 357

Fax. +31 475 385 589

Yageo Finland

Tel. +358 (0)9 2707 5851

Fax. +358 (0)9 2707 5852

Yageo France

Tel. +33 1 55 51 84 00

Fax. +33 1 55 51 84 24

Yageo Germany / Central Europe

Tel. +49 4121 870-0

Fax. +49 4121 870-271

Yageo Italy / South Europe

Tel. +39 02 2411 301

Fax. +39 02 2411 3051

Yageo UK

Tel. +44 1372 364500

Fax. +44 1372 364567

Yageo Iberia

Tel. +34 93 238 9172

Fax. +34 93 415 9951

Yageo Hungary

Tel. +36-30-3777-441

Fax. +36-94-517-701

Yageo Russia

Tel. +7 501 430 96 27

Fax. +7 095 567 02 66

Yageo Sweden / Nordic

Tel. +46 8 514 933 55

Fax. +46 8 514 933 51

Yageo Czech Republic

Tel. +420-5-43 23 92 33

Fax. +420-5-43 23 92 33

North America

Yageo USA, Seattle

Tel. +1 425 492 2818

Fax. +1 425 492 2819

Yageo USA, Dallas

Tel. +1 972 599 0099

Fax. +1 972 599 0099