Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832
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Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

Innovative Service Around the Globe YAGEO

PRODUCT SELECTION GUIDE

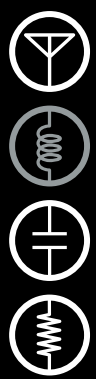
2014

SMD RESISTORS + MLCC

SMD CERAMIC EMI FILTER CAPACITORS - X2Y®

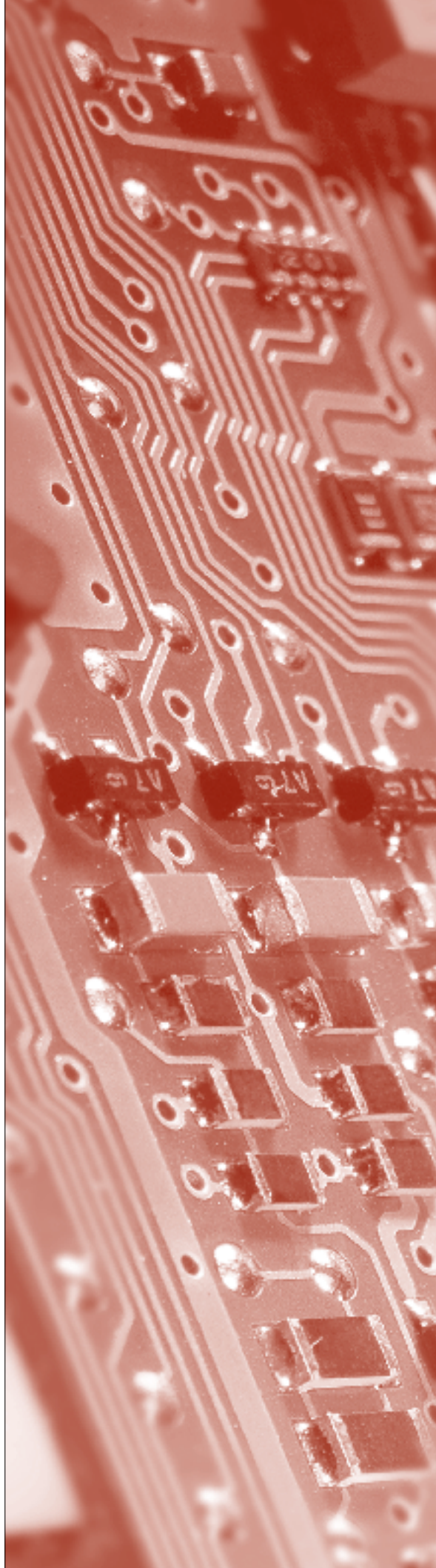
WIRELESS COMPONENTS

MULTILAYER CHIP VARISTORS



YAGEO Phycomp

www.yageo.com



Part numbering system and ordering

You can order components from this catalogue in two ways. Both ways give logistic and packing information.

- **Clear text ordering code**
  This unique number is an easily-readable code.
  - 15 digits code (PHYCOMP CTC)
  - 14 to 17 digits code (GLOBAL PART NUMBER for both Yageo and Phycomp branded products)
- **12 digits ordering code**
  This unique 12NC number forms the basis of the Phycomp logistic system.

You will find details for ordering in the "*Ordering"* section next to each selection chart.

Minimum shipment quantities, prices and delivering details can be obtained from the Yageo sales organization in your country or from one of our franchised distributors.

Case size codes

Throughout this catalogue, inch-based codes are used for the component sizes. According to IEC 60384-10, amendment 2 of September 2000 for MLCCs, and IEC 60115-8, amendment 1 of July 2000 for R-chip. Values for length and width should be in millimeters rather than in inches. To distinguish between inch-based codes and metric-based codes, metric-based codes will temporarily have the suffix ''M''. The table right next shows the relation between inch-based case sizes versus the recommended metric case size designators. Please note that HF products use metric case size only.

Case size designation and cross-reference					
Inch-based	Metric	Inch-based	Metric	Inch-based	Metric
0050	0201M	0606	1616M	1224	3250M
0075	03015M	0612	1632M	1225	3264M
01005	0402M	0616	1640M	1812	4532M
0201	0603M	0805	2012M	2007	5320M
0202	0605M	0815	2037M	2010	5025M
0402	1005M	0830	2075M	2220	5750M
0404	1010M	1008	2520M	2512	6432M
0408	1020M	1206	3216M	3014	7836M
0508	1220M	1210	3225M	4527	11070M
0603	1608M	1218	3245M		

Contact us

Founded in 1977, the Yageo Corporation has become a world-class provider of passive-component services with capabilities on a global scale, including production and sales facilities in Asia, Europe and America. The corporation is uniquely positioned to provide one-stop-shopping, offering its complete product portfolio of resistors, capacitors and inductors in both commodity and specialty versions, plus design-in capability, distribution, e-commerce connection and logistics. Yageo markets its products under the product brand names Yageo, Phycomp and Vitrohm. All products can be obtained from our Yageo sales offices, of which contact details can be found on the backcover of this catalogue. For most up-to-date information, as well as contact details of our franchise distributors, please refer to our website: **www.yageo.com**

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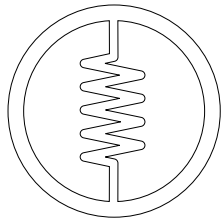
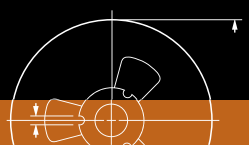


SURFACE-MOUNT CHIP RESISTORS



Chip Resistors General Information

Specification overview

Global part number	Series	Size	Power rating	Max. voltage	Operating Temp. range	Resistance range	Tolerance	T. C. R.
RC0100xR-07xxxxL	RC	01005	1/32W	15V	-55°C to 125°C	1Ω ≤ R ≤ 1MΩ Jumper < 50mΩ	±1% ±5%	1Ω ≤ R ≤ 10Ω -200~600 ppm/°C 10Ω ≤ R ≤ 1MΩ ±250 ppm/°C
RC0201xR-07xxxxL		0201	1/20W	25V		1Ω ≤ R ≤ 10MΩ Jumper < 50mΩ	Max./Min.: 1MΩ/10Ω ±0.5% Max.: 10MΩ ±1%,±5%	1Ω ≤ R ≤ 10Ω -100/+350 ppm/°C 10Ω < R ≤ 10MΩ ±200 ppm/°C
RC0402xR-07xxxxL		0402	1/16W	50V	-55°C to 155°C	1Ω ≤ R ≤ 22MΩ Jumper < 50mΩ	Max./Min.: 1MΩ/10Ω ±0.1% ±0.5% Max.: 10MΩ ±1% Max.: 22MΩ ±5%	1Ω ≤ R ≤ 10Ω ±200 ppm/°C 10Ω < R ≤ 10MΩ ±100 ppm/°C 10MΩ < R ≤ 22MΩ ±200 ppm/°C
RC0603xR-07xxxxL		0603	1/10W	50V				
RC0805xR-07xxxxL		0805	1/8W	150V				
RC1206xR-07xxxxL		1206	1/4W	200V				
RC1210xR-07xxxxL		1210	1/2W	200V				
RC1218xK-07xxxxL		1218	1W	200V		1Ω ≤ R ≤ 1MΩ Jumper < 50mΩ		
RC2010xK-07xxxxL		2010	3/4W	200V		1Ω ≤ R ≤ 22MΩ Jumper < 50mΩ		
RC2512xK-07xxxxL		2512	1W	200V				
RC0603xR-7WxxxxL		0603	1/5W	50V	-55°C to 155°C	1Ω ≤ R ≤ 1MΩ	±1% ±5%	±200 ppm/°C
RC0805xR-7WxxxxL		0805	1/4W	150V		1Ω ≤ R ≤ 1MΩ		
RC1206xR-7WxxxxL		1206	1/2W	200V				
RC2512xK-7WxxxxL		2512	2W	200V		1Ω ≤ R ≤ 150Ω		
RC0805xR-07xxxxL		0805	1/8W	150V		24MΩ ≤ R ≤ 100MΩ	±5%, ±10%, ±20%	±300 ppm/°C
RC1206xR-07xxxxL		1206	1/4W	200V		24MΩ ≤ R ≤ 100MΩ		
RE0402xRE07xxxxL	RE	0402	1/16W	50V	-55°C to 155°C	10Ω ≤ R ≤ 1MΩ	±0.1% ±0.5% ±1%	±50 ppm/°C
RE0603xRE07xxxxL		0603	1/10W	50V		10Ω ≤ R ≤ 1MΩ		
RE0805xRE07xxxxL		0805	1/8W	150V		10Ω ≤ R ≤ 1MΩ		
RE1206xRE07xxxxL		1206	1/4W	200V		10Ω ≤ R ≤ 1MΩ		
RT0402xRx07xxxxL	RT	0402	1/16W	50V	-55°C to 155°C	10Ω ≤ R ≤ 121KΩ	±0.05% ±0.1% ±0.25% ±0.5% ±1%	±10 ppm/°C ±15 ppm/°C ±25 ppm/°C ±50 ppm/°C
RT0603xRx07xxxxL		0603	1/10W	75V		5.1Ω ≤ R ≤ 681KΩ		
RT0805xRx07xxxxL		0805	1/8W	150V		5.1Ω ≤ R ≤ 1.5MΩ		
RT1206xRx07xxxxL		1206	1/4W	200V		5.1Ω ≤ R ≤ 1.5MΩ		
RT1210xRx07xxxxL		1210	1/4W		-55°C to 125°C	5.1Ω ≤ R ≤ 1MΩ		
RT2010xKx07xxxxL		2010	1/2W			10Ω ≤ R ≤ 1MΩ		
RT2512xKx07xxxxL		2512	3/4W			10Ω ≤ R ≤ 1MΩ		
YC102-xR-07xxxxL	YC	2*0201	1/32W	15V	-55°C to 125°C	10Ω ≤ R ≤ 1MΩ Jumper < 50mΩ	±1% ±5%	±200 ppm/°C
YC104-xR-07xxxxL		4*0201	1/32W	12.5V				
YC122-xR-07xxxxL		2*0402	1/16W	50V		1Ω ≤ R ≤ 1MΩ Jumper < 50mΩ	Max./Min.: 1MΩ/10Ω ±1% Max.: 1MΩ ±5%	
YC124-xR-07xxxxL		4*0402	1/16W	25V	-55°C to 155°C	1Ω ≤ R ≤ 1MΩ Jumper < 50mΩ	±1% ±5%	1Ω ≤ R < 10Ω ±250 ppm/°C 10Ω ≤ R ≤ 1MΩ ±200 ppm/°C
YC162-xR-07xxxxL		2*0603	1/16W	50V	-55°C to 125°C	10Ω ≤ R ≤ 1MΩ Jumper < 50mΩ	±5%	±200 ppm/°C
YC164-xR-07xxxxL		4*0603	1/16W	50V	-55°C to 155°C	1Ω ≤ R ≤ 1MΩ Jumper < 50mΩ	±1% ±5%	
YC248-xR-07xxxxL		8*0602	1/16W	50V		10Ω ≤ R ≤ 1MΩ Jumper < 50mΩ		
YC324-xK-07xxxxL		4*1206	1/8W	200V		10Ω ≤ R ≤ 1MΩ		
TC122-xR-07xxxxL	TC	2*0402	1/16W	50V	-55°C to 125°C	10Ω ≤ R ≤ 1MΩ Jumper < 50mΩ	±1% ±5%	±200 ppm/°C
! TC122HxR-07xxxxL								
! TC122MxR-07xxxxL								
TC124-xR-07xxxxL		4*0402	1/16W	50V				
! TC124HxR-07xxxxL								
! TC124MxR-07xxxxL								
TC164-xR-07xxxxL		4*0603	1/16W	50V		1Ω ≤ R ≤ 1MΩ		

Note: " ! " is the symbol for new product

Global part number	Series	Size	Power rating	Max. voltage	Operating Temp. range	Resistance range	Tolerance	T. C. R.
YC158TJR-07xxxxL	YC158	10P8R (0612)	1/16W	25V	-55°C to 155°C	10Ω ≤ R ≤ 100KΩ	±5%	±200 ppm/°C
YC358xJK-07xxxxL	YC358	10P8R (1225)	1/16W	50V		10Ω ≤ R ≤ 330KΩ		±200 ppm/°C
RL0402xR-07xxxxL	RL	0402	1/16W	(PxR)^1/2	-55°C to 125°C	50mΩ ≤ R < 1Ω Jumper < 20mΩ	±1% ±2% ±5%	See page 36, table “T. C. R. - RL series“
RL0603xR-07xxxxL		0603	1/10W			10mΩ ≤ R < 1Ω Jumper < 20mΩ		
RL0805xR-07xxxxL		0805	1/8W					
RL1206xR-07xxxxL		1206	1/4W					
RL1210xR-07xxxxL		1210	1/2W			10mΩ ≤ R < 1Ω		
RL1218xK-07xxxxL		1218	1W					
RL2010xK-07xxxxL		2010	3/4W					
RL2512xK-07xxxxL		2512	1W					
RL0805xR-7WxxxxL		0805	1/4W			10mΩ ≤ R < 1Ω		
RL1206xR-7WxxxxL		1206	1/2W					
PT0402xR-07xxxxL	PT	0402	1/16W	(PxR)^1/2	-55°C to 155°C	50mΩ ≤ R < 1Ω Jumper < 10mΩ	±1% ±2% ±5%	See page 41, table "T.C.R. - PT series"
PT0603xR-07xxxxL		0603	1/10W			50mΩ ≤ R < 1Ω Jumper < 8mΩ		
PT0805xR-07xxxxL		0805	1/8W			50mΩ ≤ R < 1Ω Jumper < 5mΩ		
PT1206xR-07xxxxL		1206	1/4W					
PT2010xK-07xxxxL		2010	3/4W			100mΩ ≤ R < 1Ω		
PT2512xK-07xxxxL		2512	1W					
PT0402xR-7WxxxxL		0402	1/8W			50mΩ ≤ R < 1Ω		
PT0603xR-7WxxxxL		0603	1/5W					
PT0805xR-7WxxxxL		0805	1/4W					
PT1206xR-7WxxxxL		1206	1/2W					
PT2010xK-7WxxxxL		2010	1W			100mΩ ≤ R < 1Ω		
PT2512xK-7WxxxxL		2512	2W					
PT0402xR-7TxxxxL		0402	1/6W			68mΩ		
PT0603xR-7TxxxxL		0603	1/3W			50mΩ ≤ R ≤ 68mΩ		
PT0815xK-07xxxxL	PT (Wide)	0815	1/2W	(PxR)^1/2	-55°C to 155°C	25mΩ ≤ R ≤ 50mΩ	±1% ±2% ±5%	±100 ppm/°C
PT0815xK-7WxxxxL			1W					

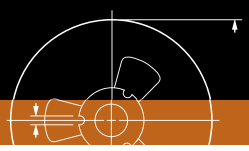
Note: “ **!** “ is the symbol for new product

Specification overview

Global part number	Series	Size	Power rating	Max. voltage	Operating Temp. range	Resistance range	Toler-ance	T. C. R.
PR1206xKx07xxxxxx	PR	1206	1/4W	(PxR)^1/2	-55°C to 170°C	1mΩ ≤ R ≤ 6mΩ	±1% ±2% ±5%	±50 ppm/°C
PR1206xKx7Wxxxxxx			1/2W					
PR1206xKx47xxxxxx			1W					
PR2010xKx07xxxxxx		2010	1/2W			1mΩ ≤ R < 100mΩ		
PR2010xKx7Wxxxxxx			1W					
PR2512xKx07xxxxxx		2512	1W			0.5mΩ ≤ R ≤ 5mΩ	±1% ±2% ±5%	0.5mΩ ≤ R ≤ 2mΩ ±200 ppm/°C 3mΩ ≤ R ≤ 5mΩ ±100 ppm/°C
PR2512xKx7Wxxxxxx			2W					
PR2512xKx7Txxxxxx			3W			0.5mΩ ≤ R ≤ 10mΩ		±50 ppm/°C
PR2512DKx07xxxxxx			1W			7mΩ ≤ R ≤ 75mΩ	±0.5%	
PR2512DKx7Wxxxxxx			2W					
PA2512xKF07xxxxL	PA	2512	1W	(PxR)^1/2	-55°C to 155°C	1mΩ ≤ R ≤ 10mΩ	±1% ±5%	±100 ppm/°C
PA2512xKF7WxxxxL			2W					
PA2512xKF7TxxxxL			3W					
! PF0402xRx07xxxxxx	PF	0402	1/16W	(PxR)^1/2	-55°C to 155°C	10mΩ ≤ R ≤ 50mΩ	±1% ±2% ±5%	±100 ppm/°C
! PF0402xRx7Wxxxxxx			1/8W					
! PF0402xRx47xxxxxx			1/4W					
PF0603xRx07xxxxxx		0603	1/10W		-55°C to 170°C	5mΩ ≤ R ≤ 100mΩ		±50 ppm/°C ±75 ppm/°C ±100 ppm/°C
PF0603xRx7Wxxxxxx			1/5W					
PF0603xRx7Txxxxxx			1/3W					
PF0603xRx47xxxxxx			2/5W					
PF0603xRx57xxxxxx			1/2W					
PF0805xRx07xxxxxx		0805	1/8W			3mΩ ≤ R ≤ 100mΩ		
PF0805xRx7Wxxxxxx			1/4W					
PF0805xRx7Txxxxxx			1/3W					
PF0805xRx47xxxxxx			1/2W					
PF1206xxx07xxxxxx		1206	1/4W			3mΩ ≤ R ≤ 100mΩ		
PF1206xxx7Wxxxxxx			1/2W					
PF1206xxx47xxxxxx			1W					
PF2010xKx07xxxxxx		2010	1/2W			5mΩ ≤ R ≤ 100mΩ		
PF2010xKx7Wxxxxxx			1W					
PF2512xKx07xxxxxx		2512	1W			6mΩ ≤ R ≤ 100mΩ		
PF2512xKx7Wxxxxxx			2W					
PF2512xKx7Txxxxxx			3W					
PF4527xKx07xxxxxx		4527	2W			5mΩ ≤ R ≤ 1Ω		
PF4527xKx7Wxxxxxx			3W					
PF4527xKx7Txxxxxx			5W					
PF4527xKx7Wxxxxxx		4527	3W			5mΩ ≤ R ≤ 1Ω	±1% ±2% ±5%	±50 ppm/°C ±75 ppm/°C ±100 ppm/°C
PF4527xKx7Txxxxxx			5W					
PF0612xKx07xxxxxx	PF (Wide)	0612	1W	(PxR)^1/2	-55°C to 170°C	1mΩ ≤ R ≤ 300mΩ	±1% ±2% ±5%	±75 ppm/°C ±100 ppm/°C
PF0612xKx7Wxxxxxx			2W					
PF0815xKx07xxxxxx		0815	1/2W			1mΩ ≤ R ≤ 100mΩ		
PF0815xKx7Wxxxxxx			1W					
PF0830xKx07xxxxxx		0830	2W			1mΩ ≤ R ≤ 100mΩ		
PF0830xKx7Wxxxxxx			3W					

Global part number	Series	Size	Power rating	Max. voltage	Operating Temp. range	Resistance range	Toler-ance	T. C. R.
! PE0612xKx07xxxxxx	PE (Wide)	0612	1W	(PxR)^1/2	-55°C to 170°C	1mΩ ≤ R ≤ 300mΩ	±1% ±2% ±5%	±75 ppm/°C ±100 ppm/°C
! PE0612xKx7Wxxxxxx			2W					
! PE0815xKx07xxxxxx		0815	1/2W			1mΩ ≤ R ≤ 100mΩ		
! PE0815xKx7Wxxxxxx			1W					
! PE0830xKx07xxxxxx		0830	2W			1mΩ ≤ R ≤ 100mΩ		
! PE0830xKx7Wxxxxxx			3W					
PH0805xRx07xxxxxx	PH	0805	4/5W	(PxR)^1/2	-55°C to 155°C	4mΩ ≤ R ≤ 50mΩ	±1% ±2% ±5%	±75 ppm/°C
PH1206xRx07xxxxxx		1206	1W					
! PE0402xRx07xxxxxx	PE	0402	1/16W	(PxR)^1/2	-55°C to 155°C	10mΩ ≤ R ≤ 50mΩ	±1% ±2% ±5%	±100 ppm/°C
! PE0402xRx7Wxxxxxx			1/8W					
! PE0402xRx47xxxxxx			1/4W					
PE0603xRx07xxxxxx		0603	1/10W		-55°C to 170°C	5mΩ ≤ R ≤ 100mΩ		±50 ppm/°C ±75 ppm/°C ±100 ppm/°C
PE0603xRx7Wxxxxxx			1/5W					
PE0603xRx7Txxxxxx			1/3W					
PE0603xRx47xxxxxx			2/5W					
PE0603xRx57xxxxxx			1/2W					
PE0805xRx07xxxxxx		0805	1/8W			3mΩ ≤ R ≤ 100mΩ		
PE0805xRx7Wxxxxxx			1/4W					
PE0805xRx7Txxxxxx			1/3W					
PE0805xRx47xxxxxx			1/2W					
PE1206xxx07xxxxxx		1206	1/4W			3mΩ ≤ R ≤ 100mΩ		
PE1206xxx7Wxxxxxx			1/2W					
PE1206xxx47xxxxxx			1W					
! PE2010xKx07xxxxxx		2010	1/2W			5mΩ ≤ R ≤ 100mΩ		
! PE2010xKx7Wxxxxxx			1W					
! PE2512xKx07xxxxxx		2512	1W			6mΩ ≤ R ≤ 100mΩ		
PE2512xKx7Wxxxxxx			2W					
! PE2512xKx7Txxxxxx			3W					
! PE4527xKx07xxxxxx		4527	2W			5mΩ ≤ R < 1Ω		
! PE4527xKx7Wxxxxxx			3W					
! PE4527xKx7Txxxxxx			5W					
! PS0306xRx07xxxxxx	PS (4 Terminal)	0306	1/8W	(PxR)^1/2	-55°C to 155°C	10mΩ ≤ R ≤ 50mΩ	±1% ±5%	±75 ppm/°C ±100 ppm/°C
! PS0306xRx7Wxxxxxx			1/4W					
! PS0508xRx07xxxxxx		0508	1/8W		-55°C to 170°C			
! PS0508xRx7Wxxxxxx			1/4W					
! PS0508xRx7Txxxxxx			1/2W					
! PS0612xKx07xxxxxx		0612	1W			0.5mΩ, 0.75mΩ 1mΩ ≤ R ≤ 5mΩ		0.5mΩ, 0.75mΩ ±700 ppm/°C 1mΩ ≤ R ≤ 2mΩ ±400 ppm/°C 3mΩ ≤ R ≤ 5mΩ ±150 ppm/°C
! PS1225xKx07xxxxxx		1225	3W			4mΩ ≤ R ≤ 50mΩ		±75 ppm/°C ±100 ppm/°C

Note: " ! " is the symbol for new product



Chip Resistors General Information

Specification overview

Global part number	Series	Size	Power rating	Max. voltage	Operating Temp. range	Resistance range	Tolerance	T. C. R.
AR0402xR-07xxxxL	AR	0402	1/16W	50V	-55°C to 155°C	1Ω ≤ R ≤ 10MΩ Jumper < 50mΩ	±1% ±5%	1Ω ≤ R ≤ 10Ω ±200 ppm/°C 10Ω < R ≤ 10MΩ ±100 ppm/°C
AR0603xR-07xxxxL		0603	1/10W	50V				
AR0805xR-07xxxxL		0805	1/8W	150V				
AR1206xR-07xxxxL		1206	1/4W	200V				
! SR0402xR-07xxxxL	SR	0402	1/16W	50V	-55°C to 155°C	1Ω ≤ R ≤ 100KΩ	±5% ±10% ±20%	±200 ppm/°C
! SR0402xR-7WxxxxL			1/8W					
! SR0603xR-07xxxxL		0603	1/10W	50V				
! SR0603xR-7WxxxxL			1/5W					
SR0805xR-07xxxxL		0805	1/8W	150V				
! SR0805xR-7WxxxxL			1/4W					
SR1206xR-07xxxxL		1206	1/4W	200V				
! SR1206xR-7WxxxxL			1/2W					
SR1218xK-07xxxxL		1218	1W	200V				
SR2010xK-07xxxxL		2010	3/4W	200V				
SR2512xK-07xxxxL		2512	1W	200V				
! RV0603xR-07xxxxL	RV	0603	1/10W	350V	-55°C to 155°C	10KΩ ≤ R ≤ 1MΩ	±1% ±5%	±200 ppm/°C
RV0805xR-07xxxxL		0805	1/8W	400V		100KΩ ≤ R ≤ 10MΩ		
RV1206xR-07xxxxL		1206	1/4W	500V		100KΩ ≤ R ≤ 27MΩ	Max.: 10MΩ ±1% Max.: 27MΩ ±5%	
RV2512JK-07xxxxL		2512	1W			4.7MΩ ≤ R ≤ 16MΩ	±5%	
TR0402xR-07xxxxL	TR	0402	1/16W	50V	-55°C to 125°C	1Ω ≤ R ≤ 10MΩ	+0/-10% +0/-20% +0/-30%	1Ω ≤ R ≤ 10Ω ±200 ppm/°C 10Ω < R ≤ 1MΩ ±100 ppm/°C 1MΩ < R ≤ 10MΩ ±200 ppm/°C
TR0603xR-07xxxxL		0603	1/16W					
TR0805xR-07xxxxL		0805	1/8W	150V	-55°C to 155°C			
TR1206xR-07xxxxL		1206	1/4W	200V				
! AF0201xR-07xxxxL		0201	1/20W	25V	-55°C to 125°C	1Ω ≤ R ≤ 10MΩ Jumper<50mΩ	±1% ±5%	1Ω ≤ R ≤ 10Ω -100/+350 ppm/°C 10Ω < R ≤ 10MΩ ±200 ppm/°C
AF0402xRx-07xxxxL		0402	1/16W	50V	-55°C to 155°C	1Ω ≤ R ≤ 22MΩ Jumper<50mΩ	Max:10MΩ ±1% Max:22MΩ ±5%	1Ω ≤ R ≤ 10Ω ±200 ppm/°C 10Ω < R ≤ 10MΩ ±100 ppm/°C 10MΩ < R ≤ 22MΩ ±200 ppm/°C
AF0603xRx-07xxxxL		0603	1/10W	50V				
AF0805xRx-07xxxxL		0805	1/8W	150V				
AF1206xRx-07xxxxL		1206	1/4W	200V				
! AF1210xRx-07xxxxL		1210	1/2W	200V		1Ω ≤ R ≤ 10MΩ Jumper<50mΩ	±1% ±5%	1Ω ≤ R ≤ 10Ω ±200 ppm/°C 10Ω < R ≤ 10MΩ ±100 ppm/°C
! AF1218xKx-07xxxxL		1218	1W	200V				
! AF2010xKx-07xxxxL		2010	3/4W	200V				
! AF2512xKx-07xxxxL		2512	1W	200V				
! AF122-xR-07xxxxL		2*0402	1/16W	50V	-55°C to 125°C	1Ω ≤ R ≤ 1MΩ Jumper < 50mΩ	±1% ±5%	1Ω ≤ R ≤ 10Ω ±250 ppm/°C 10Ω < R ≤ 1MΩ ±200 ppm/°C
! AF124-xR-07xxxxL		4*0402	1/16W	25V	-55°C to 155°C			
AC0402xR-07xxxxL	AC	0402	1/16W	50V	-55°C to 155°C	1Ω ≤ R ≤ 10MΩ Jumper < 50mΩ	±1% ±5%	1Ω ≤ R ≤ 10Ω ±200 ppm/°C 10Ω < R ≤ 10MΩ ±100 ppm/°C
AC0603xR-07xxxxL		0603	1/10W	50V				
AC0805xR-07xxxxL		0805	1/8W	150V				
AC1206xR-07xxxxL		1206	1/4W	200V				
AC1210xR-07xxxxL		1210	1/2W	200V				
AC1218xK-07xxxxL		1218	1W	200V		1Ω ≤ R ≤ 1MΩ Jumper < 50mΩ		
AC2010xK-07xxxxL		2010	3/4W	200V		1Ω ≤ R ≤ 10MΩ Jumper < 50mΩ		
AC2512xK-07xxxxL		2512	1W	200V				
ATV321xR-07xxxxL	AT	0404	40mW	50V	-55°C to 125°C	-1dB to -20dB	±0.3dB ±0.5dB ±1.0dB ±2.0dB	---

Note: " ! " is the symbol for new product

Global part number - Single resistor [3]

R C 0 4 0 2 J R — 7 D 1 0 R L

Series name (code 1-2)
- RC = Thick film general purpose
- RE = Thick film precision grade
- RT = Thin film high precision high stability
- RL = Thick film low ohmic
- PT = Thick film low ohmic low T. C. R.
- PR/PA/PF/PH/PE = Current sensor - low T. C. R.
- PS = Current sensor - low T.C.R, 4 termination
- TR = Trimmable
- SR = Surge
- AR = NiAu termination
- RV = High voltage
- AF = Sulfur resistant
- AC = Automotive grade

Size code (code 3-6)
(inch / metric)
- 0100 = 0.4 x 0.2
- 0201 = 0.6 x 0.3
- 0402 = 1.0 x 0.5
- 0603 = 1.6 x 0.8
- 0612 = 1.6 x 3.2
- 0805 = 2.0 x 1.25
- 0815 = 2.15 x 3.75
- 0830 = 2.0 x 7.5
- 1206 = 3.2 x 1.6
- 1210 = 3.2 x 2.6
- 1218 = 3.2 x 4.5
- 2010 = 5.0 x 2.5
- 2512 = 6.35 x 3.2
- 4527 = 11.0 x 7.0

Tolerance (code 7)
- W = ±0.05%
- B = ±0.1%
- C = ±0.25%
- D = ±0.5%
- F = ±1%
- G = ±2%
- J = ±5% (for RC/AR/AF/AC Jumper ordering)
- K = ±10% (for TR = 0/-10%)
- M = ±20% (for TR = 0/-20%)
- N = ±30% (for TR = 0/-30%)
- "—" for RL/PT Jumper ordering

Packing style (code 8)
- R = Paper tape reel
- K = Embossed plastic tape reel
- C = Bulk cassette
- S = ESD safe reel

T. C. R. (code 9)
- B = ±10 ppm/°C (on request)
- C = ±15 ppm/°C (on request)
- D = ±25 ppm/°C
- E = ±50 ppm/°C
- M = ±75 ppm/°C
- F = ±100 ppm/°C
- L = ± 150 ppm/°C
- G = ±200 ppm/°C
- P = ± 400 ppm/°C
- Q = ± 700 ppm/°C
- "—" = Based on spec.
- (— for thick film only)

Taping reel (code 10-11)
- 07 = 7 inch Dia. reel
- 10 = 10 inch Dia. reel
- 13 = 13 inch Dia. reel
- 7D = 7 inch Dia. reel
  2 x standard quantity

Resistance (code 12-16)
- 0R = Jumper
- 0U5 = 0.0005Ω
- 0R1 = 0.1Ω
- 1R = 1Ω
- 10R = 10Ω
- 100R = 100Ω
- 1K = 1 000Ω
- 1M = 1 000 000Ω
- 100M = 100 000 000Ω

Default code [1/2] (code 17)

Note: 1. All of our RSMD products are RoHS compliant. "LFP" of the internal 2D reel label mentions "Lead Free Process"
2. Letter L is system default code for ordering only
3. Global Part Number is the preferred clear text code for ordering Yageo and Phycomp branded products.

Ordering information - Global part number

Global part number - Power enhancement

RL 0805 J R — 7W 0R015 L

Series name (code 1-2)
- RC = Thick film general purpose
- RL = Thick film low ohmic
- PT = Thick film low ohmic low T. C. R.
- PR/PA/PF/PE = Current sensor - low T. C. R.
- PS = Current sensor - low T.C.R, 4 termination

Size code (code 3-6) (inch / metric)
- 0306 = 0.8 x 1.6
- 0508 = 1.25 x 2.0
- 0612 = 1.6 x 3.2
- 0805 = 2.0 x 1.25
- 0815 = 2.15 x 3.75
- 1206 = 3.2 x 1.6
- 1225 = 3.2 x 6.35
- 2010 = 5.0 x 2.5
- 2512 = 6.35 x 3.2
- 4527 = 11.0 x 7.0

Tolerance (code 7)
- F = ±1%
- G = ±2%
- J = ±5%

Packing style (code 8)
- R = Paper tape reel
- K = Embossed plastic tape reel

Default code (code 17)
- L / Z = Default code

Resistance (code 12-16)
- 0U5 = 0.0005Ω
- 0R01 = 0.01Ω
- 0R1 = 0.1Ω

Taping reel (code 10-11)
- 07 = 7 inch Dia. reel
- 7W = 7 inch Dia. reel 2 x standard power type
- 7T = 7 inch Dia. reel 3 x standard power type
- 47 = 7 inch Dia. reel 4 x standard power type
- 57 = 7 inch Dia. reel 5 x standard power type

T. C. R. (code 9)
- E = ±50 ppm/°C
- M = ±75 ppm/°C
- F = ±100 ppm/°C
- G = ±200 ppm/°C
- "—" = Based on spec.
- (— for thick film only)

Global part number - Arrays & Networks

YC 16 4 — J R — 07 10R L

Series name (code 1-2)
- YC = Array & Network (convex / flat) thick film
- TC = Array (concave) thick film
- AF = Sulfur resistant array (Convex) thick film

Size code (inch) (code 3-4)
- 10 = 0201 x 2 (0202)
- 0201 x 4 (0204)
- 12 = 0402 x 2 (0404)
- 0402 x 4 (0408)
- 15 = 10Pin/8R (0612)
- 16 = 0603 x 2 (0606)
- 0603 x 4 (0612)
- 24 = 0602 x 8 (0616)
- 32 = 1206 x 4 (1224)
- 35 = 10Pin/8R (1225)

Number of resistors (code 5)
- 2 = 2 resistors
- 4 = 4 resistors
- 8 = 8 resistors

Schematic (code 6)
- L = L-type (for YC358)
- T = T-type (for YC158/358)
- M = Reverse type
- H = Reverse & Half type
- "—" = Based on spec.

Default code (code 17)

Resistance (code 12-16)
- 0R = Jumper
- 0R1 = 0.1Ω
- 1R = 1Ω
- 10R = 10Ω
- 100R = 100Ω
- 1K = 1 000Ω
- 1M = 100 000 000

Taping reel (code 10-11)
- 07 = 7 inch Dia. reel
- 10 = 10 inch Dia. reel
- 13 = 13 inch Dia. reel

T.C.R. (code 9)
- "—" = Based on spec.

Packing style (code 8)
- R = Paper tape reel
- K = Embossed plastic tape reel

Tolerance (code 7)
- F = ±1%
- J = ±5% (for Jumper ordering)

Phycomp CTC ordering code - North America

Ordering example: 9C06031A10R0FKHFT = R-Chip 0603, 10R0, 1%, 5K reel

1-2	3-6	7-8	9-12	13	14	15-16	17
XX	XXXX	XX	XXXX	X	X	XX	X

Series name (code 1-2)
- 9C = Phycomp thick film chip resistors
- 9T = Phycomp thin film chip resistors

Size code (standard resistors, code 3-6)

0201	0201 (0603)
0402	0402 (1005)
0603	0603 (1608)
0805	0805 (2012)
1206	1206 (3216)
1210	1210 (3225)
1218	1218 (3248)
2010	2010 (5025)
2512	2512 (6432)
AC34	0603 (1608) 4R concave array
AV34	0603 (1608) 4R convex array
AV22	0402 (1005) 2R convex array
AV24	0402 (1005) 4R convex array
AV28	0402 (1005) 8R convex array
RN31	10P8R in 1206 convex network
FR01	1206 (3216) Fusible
FR21	0603 (1608) Fusible
SR01	1206 (3216) Surge
VR01	1206 (3216) High voltage 5%
VR02	1206 (3216) High voltage 1%
VR11	0805 (2012) High voltage 5%
VR12	0805 (2012) High voltage 1%
VR21	2512 (6432) High voltage 5%
MR22	2512 (6432) Current sensor - low T. C. R.
MF22	2512 (6432) Current sensor - low T. C. R.
V321	0404 (1010) RF attenuator

Power rating (code 7-8)

1A	1/16W	0.063W	(0402)
1A	1/10W	0.10W	(0603)
2A	1/8W	0.125W	(0805)
3A	1/4W	0.25W	(1206)
5A	1/2W	0.5W	(1210)
7A	1/20W	0.05W	(0201)
8A	1/32W	0.03125W	(RN31)
12	3/4W	0.75W	(2010)
1W	1W	1W	(1218/2512)
2W	2W	2W	

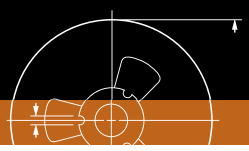
Resistance value (code 9-12)
- 0R00 = Jumper
- R0XX < 0.1Ω
- RXXX = 0.1Ω - 0.976Ω
- XRXX = 1Ω - 9.76Ω
- XXRX = 10Ω - 97.6Ω
- XXX0 = 100Ω - 976Ω
- XXX1 = 1K - 9.76K
- XXX2 = 10K - 97.6K
- XXX3 = 100K - 9.78K
- XXX4 = 1M - 9.76M
- XXX5 = 10M - 97.6M
- XXX6 = 100M+
- XXDB = 1 - 20DB

Packing style (code 17)
- T = 5K paper
- 3 = 10K paper
- 4 = 20K paper
- 5 = 4K blister
- 6 = 5K blister
- 7 = 50K paper
- P = 25K bulk case

Special coding (code 15-16)
- HF = SnPb
- PF = Lead-free
- AF = NiAu

T. C. R. (code 14)
- C = ±10 ppm/°C
- D = ±15 ppm/°C
- A = ±25 ppm/°C
- B = ±50 ppm/°C
- K = ±100 ppm/°C
- L = ±200 ppm/°C
- E = ±250 ppm/°C
- M = ±300 ppm/°C
- G = ±500 ppm/°C
- F = 0/+500 ppm/°C
- R = ±600 ppm/°C
- Q = -100/+600 ppm/°C
- P = ±750 ppm/°C
- H = ±1000 ppm/°C
- I = ±1500 ppm/°C
- J = ±2000 ppm/°C
- N = ±3000 ppm/°C

Tolerance (code 13)
- E = ±0.01%
- A = ±0.05%
- B = ±0.1%; 0.2dB (dB values apply to attenuators)
- C = ±0.25%; 0.3dB
- D = ±0.5%; 0.5dB
- F = ±1%; 1dB
- G = ±2%; 2dB
- J = ±5%
- N = 0/-20% (Right values apply to trimmable resistors)
- R = 0/-30%



Chip Resistors General Information

IEC publication 63, SPQ, last digit of 12NC

Standard of values in a decade according to "IEC publication 63"												
E24 series	10	11	12	13	15	16	18	20	22	24	27	30
	33	36	39	43	47	51	56	62	68	75	82	91
E96 series	100	102	105	107	110	113	115	118	121	124	127	130
	133	137	140	143	147	150	154	158	162	165	169	174
	178	182	187	191	196	200	205	210	215	221	226	232
	237	243	249	255	261	267	274	280	287	294	301	309
	316	324	332	340	348	357	365	374	383	392	402	412
	422	432	442	453	464	475	487	499	511	523	536	549
	562	576	590	604	619	634	649	665	681	698	715	732
	750	768	787	806	825	845	866	887	909	931	953	976

Packing quantities								
Size code	Tape width	178mm / Ø7" reel		254mm / Ø10" reel	330mm / Ø13" reel		Weight	Volume
		Paper	Embossed	Paper	Paper	Embossed	g /100pcs	mm^3
0100	8mm	20 000	---	---	---	---	0.007	0.0104
0201	8mm	10 000 / 20 000	---	---	50 000	---	0.016	0.041
0402	8mm	10 000 / 20 000	---	20 000	50 000	---	0.058	0.175
0603	8mm	5 000	---	10 000	20 000	---	0.192	0.576
0612	8mm	---	5 000	---	---	---	0.862	2.728
0805	8mm	4 000 / 5 000	---	10 000	20 000	---	0.450	1.250
0815	8mm	---	4 000	---	---	---	1.71	4.44
0830	12mm	---	4 000	---	---	---	4.594	5.55
1206	8mm	4 000 / 5 000	4 000	10 000	20 000	---	0.862	2.728
1210	8mm	5 000	---	10 000	20 000	---	1.471	4.030
1218	12mm	---	4 000	---	---	---	2.703	7.590
2010	12mm	---	4 000 / 2 000	---	---	16 000	2.273	6.875
2512	12mm	---	4 000	---	---	---	3.704	10.827
4527	24mm	---	1 000	---	---	---	16.225	48.3
YC102	8mm	10 000	---	---	---	---	0.052	---
YC104	8mm	10 000	---	---	---	---	0.099	---
AF/YC122	8mm	10 000	---	---	50 000	---	0.100	---
TC122	8mm	10 000	---	---	50 000	---	0.112	---
ATV321	8mm	10 000	--	---	---	---	0.100	---
AF/YC124	8mm	10 000	---	20 000	40 000	---	0.281	---
TC124	8mm	10 000	---	20 000	40 000	---	0.311	---
YC162	8mm	5 000	---	--	---	---	0.376	---
YC164	8mm	5 000	---	10 000	20 000	---	0.833	---
TC164	8mm	5 000	---	10 000	20 000	---	1.030	---
YC158	8mm	5 000	---	---	20 000	---	0.855	---
YC248	12mm	5 000	4 000	---	---	---	0.885	---
YC324	12mm	---	4 000	---	---	---	2.703	---
YC358	12mm	---	4 000	---	---	---	3.333	---

12NC Ordering information

The first 8 or 9 digits of the 12 digit catalogue number are given under section "Phycomp worldwide - Traditional type" on following pages.
The remaining 4 or 3 digits represent the resistance value with the last digit indicating the multiplier as shown in table on the right.

Example:

0.001 Ω = 0010 or 010
0.02 Ω = 0200 or 200
0.3 Ω = 3007 or 307
1 Ω = 1008 or 108
33 kΩ = 3303 or 333
10 MΩ = 1006 or 106

Last digit of 12NC	
Resistance	Last digit
0.001 to 0.0976 Ω	0
0.1 to 0.976 Ω	7
1 to 9.76 Ω	8
10 to 97.6 Ω	9
100 to 976 Ω	1
1 to 9.76 kΩ	2
10 to 97.6 kΩ	3
100 to 976 kΩ	4
1 to 9.76 MΩ	5
10 to 97.6 MΩ	6

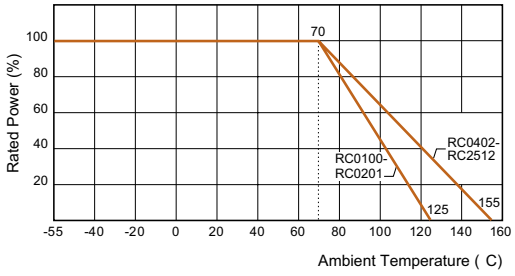
RC - Thick film general purpose chip resistors, 01005 to 2512

Features

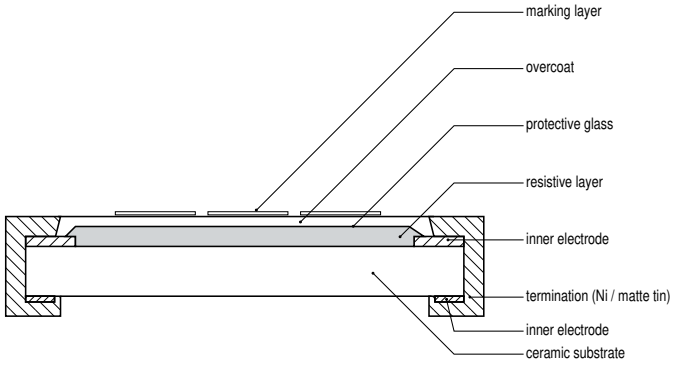
- Extremely thin and light
- Highly reliable multilayer electrode construction
- Compatible with all soldering processes
- Highly stable in auto-placement surface mounting applications
- Barrier layer end termination
- Jumper is available
- Available in 8mm tape & reel per IEC 60286-3 (EIA -RS 481)

Derating curve

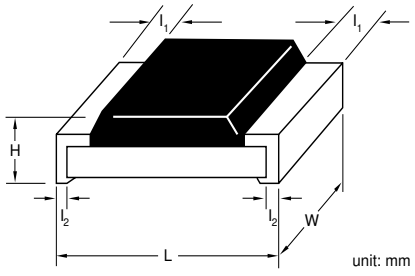
Maximum dissipation (P) in percentage of rated power as a function of the operating ambient temperature (T_{amb}).



Construction



Dimensions



Type	L	W	H	I_1	I_2
RC01005	0.40 ±0.02	0.20 ±0.02	0.13 ±0.02	0.10 ±0.03	0.10 ±0.03
RC0201	0.60 ±0.03	0.30 ±0.03	0.23 ±0.03	0.10 ±0.05	0.15 ±0.05
RC0402	1.00 ±0.05	0.50 ±0.05	0.35 ±0.05	0.20 ±0.10	0.25 ±0.10
RC0603	1.60 ±0.10	0.80 ±0.10	0.45 ±0.10	0.25 ±0.15	0.25 ±0.15
RC0805	2.00 ±0.10	1.25 ±0.10	0.50 ±0.10	0.35 ±0.20	0.35 ±0.20
RC1206	3.10 ±0.10	1.60 ±0.10	0.55 ±0.10	0.45 ±0.20	0.40 ±0.20
RC1210	3.10 ±0.10	2.60 ±0.15	0.50 ±0.10	0.45 ±0.15	0.50 ±0.20
RC1218	3.10 ±0.10	4.60 ±0.10	0.55 ±0.10	0.45 ±0.20	0.40 ±0.20
RC2010	5.00 ±0.10	2.50 ±0.15	0.55 ±0.10	0.45 ±0.15	0.50 ±0.20
RC2512 (1W)	6.35 ±0.10	3.10 ±0.15	0.55 ±0.10	0.60 ±0.20	0.50 ±0.20
RC2512 (2W)	6.35 ±0.10	3.10 ±0.15	0.55 ±0.10	0.60 ±0.20	1.15 ±0.20

Electrical characteristics								
Type	Power P_{70}	Operating Temp. range	MWV	RCOV	DWV	Resistance range & tolerance	T. C. R. (ppm/°C)	Jumper criteria (unit: A)
RC01005	1/32W	-55°C to +125°C	15V	30V	30V	E24 ±1%, 5% 1Ω≤R≤1MΩ Jumper <50mΩ	1Ω≤R≤10Ω -200~600 10Ω≤R≤1MΩ ±250	Rated current 0.5 Max. current 1.0
RC0201	1/20W	-55°C to +125°C	25V	50V	50V	E24 ±5% 1Ω≤R≤10MΩ E24/E96 ±1% 1Ω≤R≤10MΩ E24/E96 ±0.1%,±0.5% 10Ω≤R≤1MΩ Jumper <50mΩ	10Ω<R≤10MΩ ±200 1Ω≤R≤10Ω -100/+350	Rated current 0.5 Max. current 1.0
RC0402	1/16W	-55°C to +125°C	50V	100V	100V	E24 ±5% 1Ω≤R≤22MΩ E24/E96 ±1% 1Ω≤R≤10MΩ E24/E96 ±0.1%,±0.5% 10Ω≤R≤1MΩ Jumper <50mΩ	1Ω≤R≤10Ω ±200 10Ω<R≤10MΩ ±100 10MΩ<R≤22MΩ ±200	Rated current 1.0 Max. current 2.0
RC0603	1/10W	-55°C to +125°C	50V	100V	100V	E24 ±5% 1Ω≤R≤22MΩ E24/E96 ±1% 1Ω≤R≤10MΩ E24/E96 ±0.1%,±0.5% 10Ω≤R≤1MΩ Jumper <50mΩ	1Ω≤R≤10Ω ±200 10Ω<R≤10MΩ ±100 10MΩ<R≤22MΩ ±200	Rated current 1.0 Max. current 2.0
	1/5W	-55°C to +125°C	50V	100V	100V	E24 ±5% 1Ω≤R≤1MΩ E24/E96 ±1% 1Ω≤R≤1MΩ	1Ω≤R≤1MΩ ±200	-- --
RC0805	1/8W	-55°C to +155°C	150V	300V	300V	E24 ±5% 1Ω≤R≤22MΩ E24/E96 ±1% 1Ω≤R≤10MΩ E24/E96 ±0.1%,±0.5% 10Ω≤R≤1MΩ Jumper <50mΩ	1Ω≤R≤10Ω ±200 10Ω<R≤10MΩ ±100 10MΩ<R≤22MΩ ±200	Rated current 2.0 Max. current 5.0
	1/4W	-55°C to +155°C	150V	300V	300V	E24 ±5% 1Ω≤R≤1MΩ E24/E96 ±1% 1Ω≤R≤1MΩ	1Ω≤R≤1MΩ ±200	-- --
RC1206	1/4W	-55°C to +155°C	200V	400V	500V	E24 ±5% 10Ω≤R≤22MΩ E24/E96 ±1% 1Ω≤R≤10MΩ E24/E96 ±0.1%,±0.5% 10Ω≤R≤1MΩ Jumper <50mΩ	1Ω≤R≤10Ω ±200 10Ω<R≤10MΩ ±100 10MΩ<R≤22MΩ ±200	Rated current 2.0 Max. current 10.0
	1/2W	-55°C to +155°C	200V	400V	500V	E24 ±5% 1Ω≤R≤1MΩ E24/E96 ±1% 1Ω≤R≤1MΩ	1Ω≤R≤1MΩ ±200	-- --
RC1210	1/2W	-55°C to +155°C	200V	500V	500V	E24 ±5% 1Ω≤R≤22MΩ E24/E96 ±1% 1Ω≤R≤10MΩ E24/E96 ±0.5% 10Ω≤R≤1MΩ Jumper <50mΩ	1Ω≤R≤10Ω ±200 10Ω<R≤10MΩ ±100 10MΩ<R≤22MΩ ±200	Rated current 2.0 Max. current 10.0
RC1218	1W	-55°C to +155°C	200V	500V	500V	E24 ±5% 1Ω≤R≤1MΩ E24/E96 ±1% 1Ω≤R≤1MΩ E24/E96 ±0.1%,±0.5% 10Ω≤R≤1MΩ Jumper <20mΩ		Rated current 6.0 Max. current 10.0
RC2010	3/4W	-55°C to +155°C	200V	500V	500V	E24 ±5% 1Ω≤R≤22MΩ E24/E96 ±1% 1Ω≤R≤10MΩ E24/E96 ±0.1%,±0.5% 10Ω≤R≤1MΩ Jumper <50mΩ		Rated current 2.0 Max. current 10.0
RC2512	1W	-55°C to +155°C	200V	500V	500V			Rated current 2.0 Max. current 10.0
	2W	-55°C to +155°C	200V	400V	500V	E24 ±5% 1Ω≤R≤150Ω E24/E96 ±1% 1Ω≤R≤150Ω	1Ω≤R≤150Ω ±200	-- --

Environmental characteristics				
Performance test		Test method	Procedure	Requirements
Life		MIL-STD-202G-method 108A	1 000 hours at 70 ±5°C applied RCWV 1.5 hours on, 0.5 hours off, still air required	01005: ±(3% +0.05Ω) < 100mΩ for jumper Others: ±(1% +0.05Ω) for 1% tol. ±(3% +0.05Ω) for 5% tol. < 100mΩ for jumper
High temperature exposure		MIL-STD-202G-method 108A	1 000 hours at maximum operating temperature depending on specification, unpowered	01005: ±(1% +0.05Ω) < 50mΩ for jumper Others: ±(1% +0.05Ω) for 1% tol. ±(2% +0.05Ω) for 5% tol. < 50mΩ for jumper
Moisture resistance		MIL-STD-202G-method 106F	Each temperature / humidity cycle is defined as 8 hours (method 106F), 3 cycles / 24 hours for 10d with 25°C / 65°C 95% R.H	01005: ±(2.0% +0.05Ω) < 100mΩ for jumper Others: ±(0.5% +0.05Ω) for 1% tol. ±(2% +0.05Ω) for 5% tol. < 100mΩ for jumper
Thermal shock		MIL-STD-202G-method 107G	LCT / UCT, number of cycles required is 300 Maximum transfer time is 20 seconds	01005: ±(1% +0.05Ω) < 50mΩ for jumper Others: ±(0.5% +0.05Ω) for 1% tol. ±(1% +0.05Ω) for 5% tol. < 50mΩ for jumper
Solderability	Wetting	J-STD-002B testB	Electrical test not required. Magnification 50X Lead-free solder bath at 245 ±3°C Dipping time: 3 ±0.5 seconds	Well tinned (≥95% covered) No visible damage
	Resistance to soldering heat	MIL-STD-202G-method 210F	Lead-free solder, 260°C, 10 seconds immersion time	01005: ±(1% +0.05Ω) < 50mΩ for jumper Others: ±(0.5% +0.05Ω) for 1% tol. ±(1% +0.05 Ω) for 5% tol. < 50mΩ for jumper No visible damage
Short time overload		MIL-R-55342D-para 4.7.5	2.5 times RCWV or maximum overload voltage whichever is less for 5 seconds at room temperature	01005: ±(2% +0.05Ω) < 50mΩ for jumper Others: ±(1% +0.05Ω) for 1% tol. ±(2% +0.05Ω) for 5% tol. < 50mΩ for jumper No visible damage

RC - Thick film general purpose chip resistors, 01005 to 2512

Global part number - Preferred type for ordering Yageo / Phycomp branded products

Ordering example: RC0402JR-07100KL

RC 0402 J R — 07 100K L

Series name (code 1-2)
RC = General purpose thick film

Size code (code 3-6)
(inch / metric)
0100 = 0.4 x 0.2
0201 = 0.6 x 0.3
0402 = 1.0 x 0.5
0603 = 1.6 x 0.8
0805 = 2.0 x 1.25
1206 = 3.2 x 1.6
1210 = 3.2 x 2.6
1218 = 3.2 x 4.5
2010 = 5.0 x 2.5
2512 = 6.35 x 3.2

Tolerance (code 7)
B = ±0.1%
D = ±0.5%
F = ±1%
J = ±5% (for Jumper ordering)

Default code(1/2) (code 17)

Resistance (code 12-16)
0R = Jumper
10R = 10Ω
100R = 100Ω
100K = 100KΩ

Taping reel (code 10-11)
07 = 7 inch Dia. reel
10 = 10 inch Dia. reel
13 = 13 inch Dia. reel
7D = 7 inch Dia. reel, 2 x standard quantity
7W = 7 inch Dia. reel, 2 x standard power

T. C. R. (code 9)
"—" = Based on spec.
(— for thick film only)

Packing style (code 8)
R = Paper tape reel
K = Embossed plastic tape reel
C = Bulk cassette
S = ESD safe reel

Note: 1. All of our RSMD products are RoHS compliant. "LFP" of the internal 2D reel label mentions "Lead Free Process"
2. Letter L is system default code for ordering only

Phycomp worldwide - Traditional type										
General purpose thick film / RC series										
Size: inch (mm)		**0201 (0603)**		**0402 (1005)**		**0603 (1608)**		**0805 (2012)**	
Power		1/20 W		1/16 W		1/10 W		1/8 W	
Tolerance		+5%	+1%	+5%	+1%	+5%	+1%	+5%	+1%
Resistance		E24	E24 / E96	E24	E24 / E96	E24	E24 / E96	E24	E24 / E96
Packing		paper tape		paper tape		paper tape		paper tape	
Quantity	5 000	---	---	---	---	2322 702 60...L	2322 704 6....L	2322 730 61...L	2322 734 6....L
	10 000	2322 803 70...L	2322 806 7....L	2322 705 70...L	2322 706 7....L	2322 702 70...L	2322 704 7....L	2322 730 71...L	2322 734 7....L
	20 000	2322 806 80...L	2322 806 8....L	---	---	2322 702 81...L	2322 704 8....L	2322 730 81...L	2322 734 8....L
	50 000	2322 803 60...L	2322 806 6....L	2322 705 87...L	2322 706 8....L	---	---	---	---
Jumper	5 000	---	---	---	---	2322 702 96001L	---	2322 730 91002L	---
	10 000	2322 803 91001L	---	2322 705 91001L	---	2322 702 97001L	---	2322 730 91003L	---
	20 000	---	---	---	---	2322 702 92002L	---	2322 730 92002L	---
	50 000	---	---	2322 705 91007L	---	---	---	---	---

For ordering rules: See page 14 for E24 / E96 values and the last 4 or 3 digits of the 12NC catalogue number

Phycomp worldwide - Traditional type											
General purpose thick film / RC series											
Size: inch (mm)		**1206 (3216)**		**1210 (3225)**		**1218 (3248)**		**2010 (5025)**		**2512 (6432)**	
Power		1/4 W		1/2 W		1 W		3/4 W		1 W	
Tolerance		+5%	+1%	+5%	+1%	+5%	+1%	+5%	+1%	+5%	+1%
Resistance		E24	E24 / E96	E24	E24 / E96	E24	E24 / E96	E24	E24 / E96	E24	E24 / E96
Packing		paper tape		paper tape		blister tape		blister tape		blister tape	
Quantity	4 000	---	---	---	---	2322 735 64...L	2322 735 7....L	2322 760 60...L	2322 761 6....L	2322 762 60...L	2322 763 6....L
	5 000	2322 711 61...L	2322 724 6....L	2390 735 70...L	2390 735 3....L	---	---	---	---	---	---
	10 000	2322 711 51...L	2322 724 7....L	---	---	---	---	---	---	---	---
	20 000	2322 711 81...L	2322 724 8....L	2390 735 71...L	2390 735 5....L	---	---	---	---	---	---
Jumper	4 000	---	---	---	---	2322 735 90007L	---	2322 760 90003L	---	2322 762 90000L	---
	5 000	2322 711 91032L	---	2390 735 90001L	---	---	---	---	---	---	---
	10 000	2322 711 91005L	---	---	---	---	---	---	---	---	---
	20 000	2322 711 92004L	---	---	---	---	---	---	---	---	---

For ordering rules: See page 14 for E24 / E96 values and the last 4 or 3 digits of the 12NC catalogue number

Phycomp CTC ordering code - Traditional type - North America
Regional code for ordering Phycomp branded products. Please see page 15 for details.

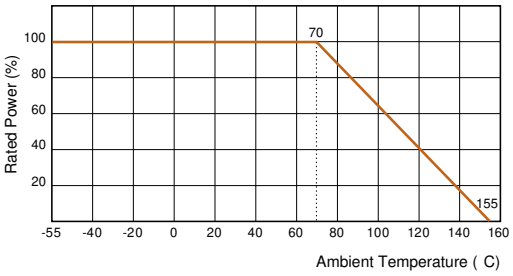
RC - Thick film high ohmic chip resistors, 0805 / 1206

Features

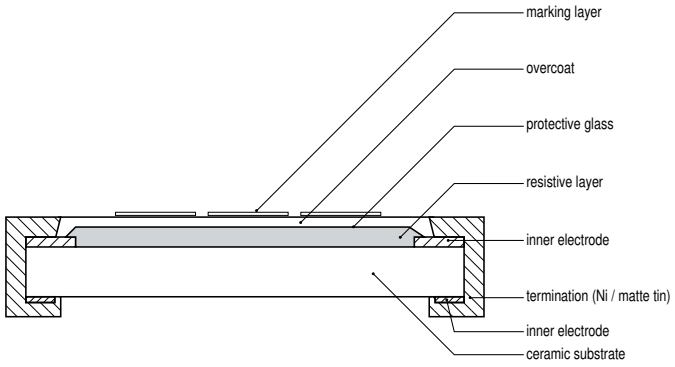
- Reduced size of final equipment
- Low assembly costs
- Higher component and equipment reliability
- High ohmic values up to 100MΩ
- Suitable for power supplies in small equipment

Derating curve

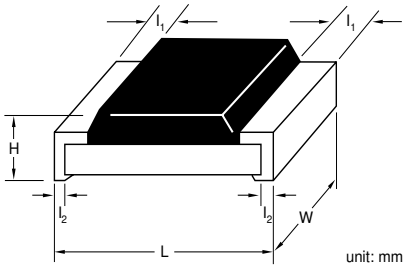
Maximum dissipation (P) in percentage of rated power as a function of the operating ambient temperature (T_{amb}).



Construction



Dimensions



Type	L	W	H	I_1	I_2
RC0805	2.00 ±0.10	1.25 ±0.10	0.50 ±0.10	0.35 ±0.20	0.35 ±0.20
RC1206	3.10 ±0.10	1.60 ±0.10	0.55 ±0.10	0.45 ±0.20	0.40 ±0.20

Electrical characteristics							
Type	Power P_{70}	Operating Temp. range	MWV	RCOV	DWV	Resistance range & tolerance	T. C. R.
RC0805	1/8W	-55°C to +155°C	150V	300V	300V	E24 ±5%, ±10%, ±20% 24MΩ ≤ R ≤ 100MΩ	±300 ppm/°C
RC1206	1/4W	-55°C to +155°C	200V	400V	500V		

Note: See page 11 for ordering code. For more detailed, please contact our sales offices, distributors and representatives in your region.

Environmental characteristics				
Performance test		Test method	Procedure	Requirements
Life		MIL-STD-202G-method 108A	1 000 hours at 70 ±5°C applied RCWV 1.5 hours on, 0.5 hours off, still air required	±(2% +0.05Ω)
High temperature exposure		MIL-STD-202G-method 108A	1 000 hours at maximum operating temperature depending on specification, unpowered	±(1% +0.05Ω)
Moisture resistance		MIL-STD-202G-method 106F	Each temperature / humidity cycle is defined as 8 hours (method 106F), 3 cycles / 24 hours for 10d with 25°C / 65°C 95% R.H	±(2% +0.05Ω)
Thermal shock		MIL-STD-202G-method 107G	LCT / UCT, number of cycles required is 300 Maximum transfer time is 20 seconds	±(1% +0.05Ω)
Solderability	Wetting	J-STD-002B testB	Electrical test not required. Magnification 50X Lead-free solder bath at 245 ±3°C Dipping time: 3 ±0.5 seconds	Well tinned (≥95% covered) No visible damage
	Resistance to soldering heat	MIL-STD-202G-method 210F	Lead-free solder, 260°C, 10 seconds immersion time	±(1% +0.05Ω) No visible damage
Short time overload		MIL-R-55342D-para 4.7.5	2.5 times RCWV or maximum overload voltage whichever is less for 5 seconds at room temperature	±(2% +0.05Ω) No visible damage

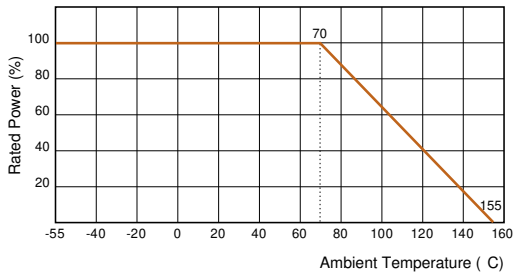
RE - Thick film precision grade chip resistors, 0402 to 1206

Features

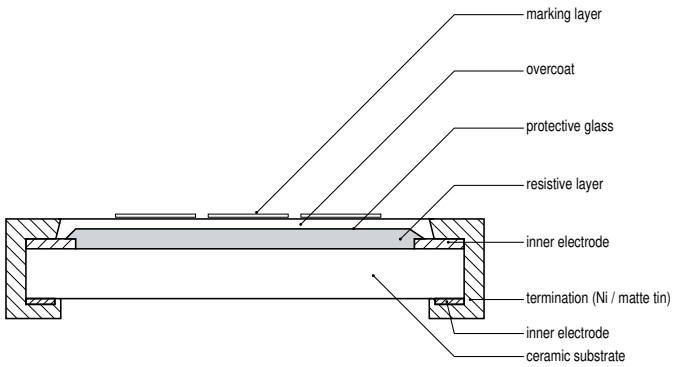
- Narrow tolerance
- Low T. C. R.
- Highly reliable multilayer electrode construction
- Compatible with all soldering processes
- Suitable for auto-placement surface mounting applications
- Available in 8mm tape & reel per EIA RS481

Derating curve

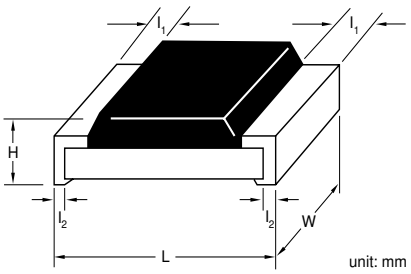
Maximum dissipation (P) in percentage of rated power as a function of the operating ambient temperature (T_{amb}).



Construction



Dimensions



Type	L	W	H	I_1	I_2
RE0402	1.00 ±0.05	0.50 ±0.05	0.32 ±0.05	0.20 ±0.10	0.25 ±0.10
RE0603	1.60 ±0.10	0.80 ±0.10	0.45 ±0.10	0.25 ±0.15	0.25 ±0.15
RE0805	2.00 ±0.10	1.25 ±0.10	0.50 ±0.10	0.35 ±0.20	0.35 ±0.20
RE1206	3.10 ±0.10	1.60 ±0.10	0.55 ±0.10	0.45 ±0.20	0.40 ±0.20

RE - Thick film precision grade chip resistors, 0402 to 1206

Electrical characteristics							
Type	Power P_{70}	Operating Temp. range	MWV	RCOV	DWV	Resistance range & tolerance	T. C. R.
RE0402	1/16W	-55°C to +155°C	50V	100V	100V	E24/E96 ±0.1%,±0.5%, ±1% 10Ω ≤ R ≤ 1MΩ	±50 ppm/°C
RE0603	1/10W	-55°C to +155°C	50V	100V	100V		
RE0805	1/8W	-55°C to +155°C	150V	300V	300V		
RE1206	1/4W	-55°C to +155°C	200V	400V	500V		

Environmental characteristics				
Performance test		Test method	Procedure	Requirements
Life		MIL-STD-202G-method 108A	1 000 hours at 70 ±5°C applied RCWV 1.5 hours on, 0.5 hours off, still air required	±(3% +0.05Ω)
High temperature exposure		MIL-STD-202G-method 108A	1 000 hours at maximum operating temperature depending on specification, unpowered	±(3% +0.05Ω)
Moisture resistance		MIL-STD-202G-method 106F	Each temperature / humidity cycle is defined as 8 hours (method 106F), 3 cycles / 24 hours for 10d with 25°C / 65°C 95% R.H	±(3% +0.05Ω)
Thermal shock		MIL-STD-202G-method 107G	LCT / UCT, number of cycles required is 300 Maximum transfer time is 20 seconds	±(1% +0.05Ω)
Solderability	Wetting	IPC/JEDECJ-STD-002B testB	Electrical test not required. Magnification 50X Lead-free solder bath at 245 ±3°C Dipping time: 3 ±0.5 seconds	Well tinned (≥95% covered) No visible damage
	Resistance to soldering heat	MIL-STD-202G-method 210F	Lead-free solder, 260°C, 10 seconds immersion time	±(0.5%+ 0.05Ω) No visible damage
Short time overload		MIL-R-55342D-para 4.7.5	2.5 times RCWV or maximum overload voltage whichever is less for 5 seconds at room temperature	±(1%+ 0.05Ω) No visible damage