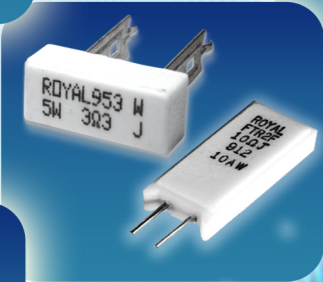
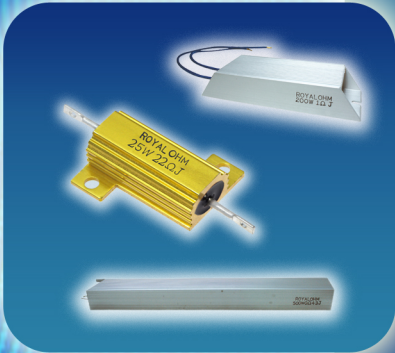
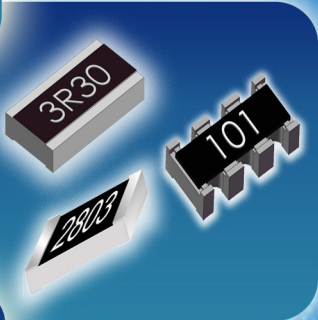
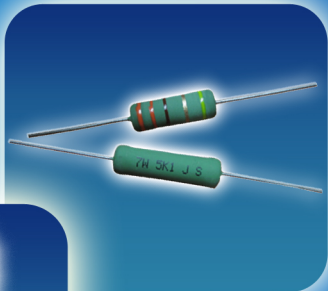
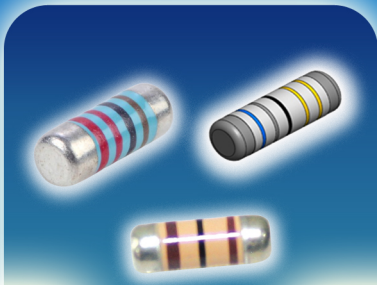




ROYALOHM



ISO 14001
IATF 16949



Product List

Series Power Rating Value Range Tol T.C.R.
PPM/°C & REMARKS

CHIP RESISTORS

General Purpose

01005, 0201, 0402, 0603,
0805, 1206, 1210, 1812,
2010, 2512

High ohmic value Available in sizes

0402,0603,0805,1206,1210,1812,2010,2512



RMC

1/32W 0Ω/0.01Ω
~
1W 100MΩ

±0.5%
±1%
±2%
±5%

0.01Ω~0.015Ω: ±1500PPM/°C
0.0154Ω~0.03Ω: ±1000PPM/°C
0.033Ω~0.976Ω: ±800PPM/°C
1Ω~10Ω: ±200PPM/°C
>10Ω~10M: ±100PPM/°C
>10M~100M: ±200PPM/°C
(01005, 0201, 0402 & 0603 refer to catalog)

Complete Pb-Free



PF0A, PF01, PF02, PF03, PF05, PF06,
PF07, PF11, PF10, PF12



PF

1/32W 0Ω/1Ω
~
1W 10MΩ

±0.5%
±1%
±5%

1Ω~10Ω: ±400PPM/°C
>10Ω~100Ω: ±200PPM/°C
>100Ω: ±100PPM/°C
(PF0A, PF01 refer to catalog)

Wide Terminal



WR08, WR12, WR20, WR18, WR25



WR

1/3W 0Ω/10mΩ
~
3W 1MΩ

±0.5%
±1%
±5%

Low TCR till ±100PPM/°C.
Depends on size, power & value.
Refer to catalog

Anti-Surge

AS02, AS03, AS05, AS06, AS07,
AS10, AS12



AS

1/8W 1Ω
~
2W 10MΩ

±5%
±10%
±20%

1Ω~10Ω: ±400PPM/°C
>10Ω~10MΩ: ±100PPM/°C

High Precision Anti-Surge

PS02, PS03, PS05, PS06, PS07,
PS10, PS12



PS

1/8W 0.1Ω
~
2W 10MΩ

±0.5%
±1%
±5%

PS02: 1Ω~10Ω: ±400PPM/°C
>11Ω~100Ω: ±200PPM/°C
>100Ω: ±100PPM/°C
Other sizes: ±100PPM/°C

High Power Anti-Surge

HS02, HS03, HS05, HS06, HS07



HS

1/5W 1Ω
~
1W 10MΩ

±0.5%
±1%
±5%

HS02: 1Ω~10Ω: ±400PPM/°C
>11Ω~100Ω: ±200PPM/°C
≥100Ω: ±100PPM/°C
Other sizes: 1Ω~10Ω:
±200PPM/°C
≥10Ω: ±100PPM/°C

Anti-Electrostatic Discharge

ES01, ES02, ES03, ES05,
ES06, ES07



ES

1/20W 1Ω
~
1/2W 10MΩ

±0.5%
±1%
±5%

1Ω~10Ω: ±200PPM/°C
>10Ω~10MΩ: ±100PPM/°C
(ES01 refer to catalog)

High Power

HP02, HP03, HP05, HP06,
HP07, HP10, HP11, HP12



HP

1/10W 0Ω/0.01Ω
~
2W 10MΩ

±0.5%
±1%
±5%

Low TCR till ±100PPM/°C.
Depends on size, power & value.
Refer to catalog

Ultra High Power

SP10, SP12, SP17, SP20, SP27
(Product design Patent no.: I566261)



SP

2W 1Ω
~
6W 10MΩ

±1%
±5%

1Ω~10Ω: ±200PPM/°C
>10Ω~10MΩ: ±100PPM/°C

High-Voltage

HV03, HV05, HV06, HV07,
HV10, HV12



HV

1/10W 47Ω
~
1W 10MΩ

±0.5%
±1%
±5%

±100PPM/°C

High-Voltage Anti-Sulfurized

VS05, VS10, VS12



VS

1/8W 39KΩ
~
1W 10MΩ

±0.5%
±1%
±5%

±100PPM/°C

Anti-Sulfurized Automotive (NQ)

High Quality Anti-Sulfurized (NS)

0201, 0402, 0603, 0805, 1206,
1210, 2010, 2512



NQ
NS

1/20W 0Ω/1Ω
~
1W 10MΩ

±0.5%
±1%
±5%

1Ω~10Ω: ±200PPM/°C
>10Ω: ±100PPM/°C
(NQ01, NS01, NS10 refer to catalog)

Low T.C.R

LT02, LT03, LT05, LT06



LT

1/16W 1Ω
~
1/4W 1MΩ

±0.25%
±0.5%
±1%

1Ω~10Ω: ±100PPM/°C
>10Ω~1M: ±50PPM/°C
LT02: ±50PPM/°C

Automotive Standard Power

0201, 0402, 0603, 0805, 1206, 1210,
2010, 2512



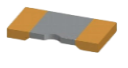
CQ

1/20W 0Ω/0.01Ω
~
1W 10MΩ

±0.5%
±1%
±2%
±5%

CQ01: 1Ω~10Ω: ~100~+350PPM/°C
>10Ω ±200PPM/°C
(CQ02~CQ12 refer to catalog)

Product List

			Series	Power Rating	Value Range	Tol	T.C.R. PPM/°C & REMARKS
Automotive High Power 0402, 0603, 0805, 1206, 1210, 2010, 2512			HQ	1/10W ~ 2W	0Ω/1Ω ~ 10MΩ	±0.5% ±1% ±5%	1Ω~10Ω: ±200PPM/°C >10Ω: ±100PPM/°C
Automotive Low Resistance CS02, CS03, CS05, CS06, CS07, CS10, CS11, CS12			CS	1/8W ~ 1W	10mΩ ~ 1Ω	±1% ±5%	Low TCR till ±100PPM/°C. Depends on size, power & value. <i>Refer to catalog</i>
Metal Strip LR06, LR12			LR	1/4W ~ 3W	0.5mΩ ~ 350mΩ	±1% ±2% ±5%	<1mΩ: ±75PPM/°C ≥1mΩ: ±50PPM/°C
Metal Alloy Low Resistance ML05, ML06, ML12, ML25, ML28, ML27			ML	1/2W ~ 5W	0.2mΩ ~ 500mΩ	±0.5% ±1% ±2% ±5%	Low TCR till ±50PPM/°C. Depends on size, power & value. <i>Refer to catalog</i>
Metal Foil MS01, MS02, MS03, MS05, MS06 MS10, MS12			MS	1/5W ~ 3W	2.5mΩ ~ 200mΩ	±1%	Low TCR till ±50PPM/°C. Depends on size, power & value. <i>Refer to catalog</i>
Metal Foil Wide Terminal MW08, MW12, MW15, MW25			MW	1W ~ 3W	1mΩ ~ 100mΩ	±0.5% ±1% ±2%	Low TCR till ±50PPM/°C. Depends on size, power & value. <i>Refer to catalog</i>
Metal Film Low Resistance TL01, TL02, TL03, TL05, TL06, TL07, TL10, TL12			TL	1/10W ~ 3W	39mΩ ~ 10Ω	±0.5% ±1% ±2% ±5%	39mΩ~50mΩ: ±150PPM/°C >50mΩ~100mΩ: ±100PPM/°C >100mΩ~10Ω: ±50PPM/°C
Alloy Shunt Resistors RA12, RA20, RA30, RA26, RA27			RA	3W ~ 15W	0.1mΩ ~ 5mΩ	±0.5% ±1% ±2% ±5%	Low TCR till ±50PPM/°C. Depends on size, power & value. <i>Refer to catalog</i>
Alloy Shunt Resistors RH21			RH	9W	0.1mΩ ~ 1mΩ	±0.5% ±1% ±5%	0.1mΩ~0.2mΩ: ±125PPM/°C 0.5mΩ~1mΩ: ±50PPM/°C
High Precision Thin Film TC02, TC03, TC05, TC06, TC07, TC10, TC12			TC	1/16W ~ 3/4W	1Ω ~ 1MΩ	±0.1% ±0.25% ±0.5% ±1%	Low TCR till ±10PPM/°C. Depends on size, power & value. <i>Refer to catalog</i>
Chip Array (Convex) 2D02, 2D03, 4D02, 4D03, 4DP3, 16P8			Array	1/16W ~ 1/10W	0Ω/1Ω ~ 1MΩ	±1% ±5%	±200PPM/°C 4D03,4DP3,16P8: <10Ω: ±400PPM/°C >10Ω: ±200PPM/°C
Chip Array (Concave) 2C02, 4C02, 4C03			Array	1/16W ~ 1/10W	0Ω/1Ω ~ 1MΩ	±1% ±5%	±200PPM/°C 4C03: <10Ω: ±400PPM/°C >10Ω: ±200PPM/°C
Chip Array (Flat Terminal) 2F01, 4F01			Array	1/20W	0Ω/10Ω ~ 1MΩ	±1% ±5%	±200PPM/°C
Chip Array Anti-Sulfurized 2S02, 4S02, 4S03			Array	1/16W	0Ω/1Ω ~ 1MΩ	±1% ±5%	±200PPM/°C 4S03: <10Ω: ±400PPM/°C >10Ω: ±200PPM/°C
Chip Resistors Network 8R06, 8S06, 10P8, 10S8, 10T8, 10E9			Resistor Network	1/32W 1/16W	0Ω/10Ω ~ 1MΩ	±1% ±5%	±200PPM/°C

Product List

Series

Power
Rating

Value
Range

Tol

T.C.R.
PPM/°C & REMARKS

CHIP / THROUGH HOLE RESISTORS KIT

Album Type

*Std SMD

*CQ, HP, SP12

*CFR, MFR, MOR



Album

1/16W
~
3W

E-6
E-12
E-24
E-96

±1%
±2%
±5%

E Series and value range will depend on the resistor type

Plastic Bag Type

CFR, MFR, MOR



Plastic
Bag

1/16W
~
1W

E-6
E-12
E-24

±1%
±2%
±5%

Customize KIT is available upon request

NETWORK RESISTORS - SIL

Resistor Network

4-14 PINS



RNL
RPL
RNM
RPH

1/8W
~
1/2W

10Ω
~
1MΩ

±2%
±5%

Low TCR till ±100PPM/°C.
Depends on type & value.
Refer to catalog

MELF RESISTORS & JUMPER

Carbon Film - MELF

0204, 0207, 0309



MCxx

1/4W
~
2W

1Ω
~
5.1MΩ

±2%
±5%

1Ω~100KΩ: ±350PPM/°C
101KΩ~500KΩ: ±700PPM/°C
501KΩ~1MΩ: ±1000PPM/°C
1MΩ~5.1MΩ: ±1500PPM/°C

Metal Film - MELF

0204, 0207



Mxx
Gxx

1/6W
~
1/2W

0.51Ω
~
10MΩ

±0.1%
±0.25%
±0.5%
±1%
±2%
±5%

Low TCR till ±15PPM/°C.
Depends on size, power & value.
Refer to catalog

High Power Metal Film - MELF

0204, 0207, 0309, 0411



Pxx

2/5W
~
3W

0Ω/0.5Ω
~
10MΩ

±0.5%
±1%
±5%

Low TCR till ±25PPM/°C.
Depends on size, tolerance & value. *Refer to catalog*

Auto-Grade Metal Film - MELF

0204, 0207, 0309, 0411



Axx

2/5W
~
3W

0.22Ω
~
4.7MΩ

±1%
±2%
±5%

Low TCR till ±25PPM/°C.
Depends on size, tolerance & value. *Refer to catalog*

Anti-Surge - MELF

0204, 0207, 0309, 0411



AMxx

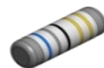
1/4W
~
3W

0.1Ω
~
10MΩ

±1%
±2%
±5%

TCR till ±200PPM/°C. Depends on size, tolerance & value. *Refer to catalog*

Fusible Wire Wound with Surge MELF (0309)



FA39
FT39

1W

1Ω
~
470Ω

±5%

±200PPM/°C

Jumper Wire



ZW

φ0.45mm
~
φ2.00mm

0Ω

N/A

N/A

Zero Ohm



ZOC
ZOT

1/8W
~
1/4W

0Ω

N/A

ZOC (Ceramic Rod)
ZOT (Steel Rod)
ZOC 1/4W is EOL

Carbon Film



CFR

1/8W
~
3W

1Ω
~
10MΩ

±2%
±5%
±10%

≤10Ω: ±300PPM/°C
11Ω~99KΩ: ±450PPM/°C
100KΩ~1MΩ: 0~700PPM/°C
1.1MΩ~10MΩ: 0~1500PPM/°C

Precision Metal Film



MFR

1/8W
~
3W

10Ω
~
1MΩ

±0.1%
±0.25%
±0.5%
±1%
±2%
±5%

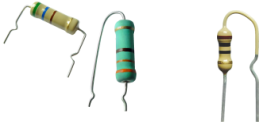
Low TCR till ±15PPM/°C.
Depends on size, power & value.
Refer to catalog

This document is a general reference only, please refer to datasheet for details.

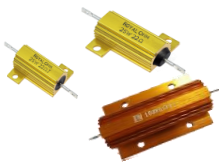
Any resistor items not listed in this document, please send inquiry to your Contact Sales.

CYV1120260507

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Product List		Series	Power Rating	Value Range	Tol	T.C.R. PPM/°C & REMARKS
Metal Oxide		MOR	1/4W ~ 9W	0.1Ω ~ 680KΩ	±2% ±5% ±10%	±350PPM/°C
Fusible  (UL Approved - No. E306074)		FRN	1/4W ~ 3W	0.22Ω ~ 10KΩ	±2% ±5% ±10%	±350PPM/°C
Metal Glaze Film (UL Approved - No. E364163)   		MGR	1/4W ~ 3W	1KΩ ~ 1GΩ	±1% ±2% ±5% ±10%	±200PPM/°C
Power Metal		PMR	1W ~ 3W	0.56Ω ~ 1MΩ	±2% ±5%	TCR till ±350PPM/°C. Depends on size, power & value. Refer to catalog
Wire-Wound		KNP	1/4W ~ 10W	0.01Ω ~ 15KΩ (Refer to catalog)	±1% ±2% ±5% ±10%	<20Ω: ±400PPM/°C ≥20Ω: ±300PPM/°C
Wire-Wound  (UL Approved - No. E306074)		KNPU	1W ~ 7W	0.47Ω ~ 240Ω	±2% ±5% ±10%	<20Ω: ±400PPM/°C ≥20Ω: ±300PPM/°C
Anti-Surge Wire-Wound High Power-small body size Available!		KNPA	1/2W ~ 10W	1.5Ω ~ 15KΩ	±1% ±2% ±5% ±10%	<20Ω: ±400PPM/°C ≥20Ω: ±300PPM/°C
Fusible Wire-Wound  Anti surge Available - FWRA (UL Approved - No. E306074)		FWR FWRA	1W ~ 5W	0.47Ω ~ 1K	±5%	<20Ω: ±400PPM/°C ≥20Ω: ±300PPM/°C
Terminal Wire-Wound		KNH KNHA KNS	2W ~ 100W	0.4Ω ~ 50KΩ	±2% ±5% ±10%	<20Ω: ±400PPM/°C ≥20Ω: ±300PPM/°C
Thermal Fusing Wire-Wound		TFR	1W	2.2Ω ~ 4.7Ω	±5% ±10%	±400PPM/°C
Metal Glazed Film Fixed Resistors Patent No.: 1581275		RC06 RC06-1	0.25W	1Ω ~ 10MΩ	±1% ±5%	1Ω ~ 10Ω: ±400PPM/°C 11Ω ~ 100Ω: ±200PPM/°C >100Ω: ±100PPM/°C
Terminal Type Metal Oxide		TMOR TMOV TMOL	3W ~ 13W	≤10Ω ~ 82KΩ	±5% ±10%	<20Ω: ±400PPM/°C ≥20Ω: ±350PPM/°C
Forming Type Panaset, Avisert, Formed		CFR MFR MOR FRN KNP	1/4W ~ 7W	10Ω ~ 1MΩ	±2% ±5% ±10%	Depends on resistor type, size and value. Refer to catalog
CEMENT TYPE RESISTORS						
Axial Ledded		PRW PRWA PRWC PRWC-1	1W ~ 25W	0.1Ω ~ 200KΩ	±5% ±10%	<20Ω: ±400PPM/°C ≥20Ω: ±350PPM/°C
Radial Ledded		PRM PRMT PRMA PRMB PRS	2W ~ 25W	0.1Ω ~ 200KΩ	±5% ±10%	<20Ω: ±400PPM/°C ≥20Ω: ±350PPM/°C

Product List

		Series	Power Rating	Value Range	Tol	T.C.R. PPM/°C & REMARKS
Radial Terminal		PRZ PRV PRT PRTA PRU	5W ~ 50W	0.1Ω ~ 200KΩ	±5% ~ ±10%	<20Ω: ±400PPM/°C ≥20Ω: ±350PPM/°C
Vertical or Axial		PRWI	4W ~ 17W	1Ω ~ 39KΩ	±5% ~ ±10%	<20Ω: ±400PPM/°C ≥20Ω: ±350PPM/°C
Thermal Fusible		FTR	1.4W ~ 5.2W	0.22Ω ~ 1.8KΩ	±5% ~ ±10%	<20Ω: ±400PPM/°C ≥20Ω: ±350PPM/°C
Power Flat Alloy		PFA	2W ~ 10W	0.01Ω ~ 3.3Ω	±5% ~ ±10%	≥0.1Ω: ±350PPM/°C (<0.1Ω pls contact us)
SHUNT & COIL RESISTORS						
Shunt		CSR	4.5A ~ 50A	1mΩ ~ 50mΩ	±5% ~ ±10%	±100PPM/°C
Coil		CSS	4.5A ~ 12A	3mΩ ~ 50mΩ	±5% ~ ±10%	Depends on value range
INDUSTRIAL POWER RESISTORS						
Power Dissipation Mount		PDM0 / PDMT PDM1 / PDM2 PDMH PDMM PDMS	5W ~ 500W	0.5Ω ~ 22KΩ	±5% ~ ±10%	<20Ω: ±400PPM/°C ≥20Ω: ±350PPM/°C
Power (Ribbon) Wire-Wound		QH QL QR QRZG	20W ~ 2500W	0.1Ω ~ 360KΩ	±5% ~ ±10%	<20Ω: ±400PPM/°C ≥20Ω: ±300PPM/°C
Aluminum Case High Power Wire-Wound		HEWR HBWR	60W ~ 4000W	0.5Ω ~ 15KΩ	±5% ~ ±10%	<20Ω: ±400PPM/°C ≥20Ω: ±350PPM/°C
Thermal Fuse Wire-Wound (Blower Fan Resistor)		ASSY	12V	0.1Ω ~ 10Ω	±5% ~ ±10%	±350PPM/°C
Vitreous Enamel Power Wire-wound Resistors		VWT1	90W ~ 375W	0.1Ω ~ 10KΩ	±5% ~ ±10%	±400PPM/°C

****Customized design capability**

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