

Chip Resistors

HOW TO ORDER

WR	12	X	1000	F	T	L
<u>Type code</u> WR : General 1~10MR MR: Automotive SR: Anti-Sulfuration ZR: Non magnetic	<u>Size code</u> 25 : 2512 (6432) 20 : 2010 (5025) 18 : 1218 (3248) 12 : 1206 (3216) 10 : 1210 (3225) 08 : 0805 (2012) 06 : 0603 (1608) 04 : 0402 (1005) 02 : 0201 (0603) 01 : 01005 (0402)	<u>Functional code</u> X : 5% for 1 ~ 10MΩ 1% for 10 ~ 1MΩ W : 1% for <10Ω and >1MΩ Y : 5% for 1 ~ 10MΩ (Low profile) 1% for 10 ~ 1MΩ (Low profile) Z : 1% for <10Ω or >1MΩ (Low profile) F: TC100 1-10ohm, 1% E: TC100, 100-1Mohm, 5%	<u>Resistance</u> E24(J tol.) : 2 significant digits followed by No. of zeros and a blank e.g. : 3ohm = 3R0_ 10ohm = 100_ 220ohm = 221_ 56Kohm = 563_ (" " means blank) E24+E96 (F tol.) : 3 significant digits followed by No. of zeros e.g. : 3Ω = 3R00 10Ω = 10R0 220Ω = 2200 56KΩ = 5602	<u>Tolerance</u> F : ± 1% J : ± 5% P : Jumper	<u>Packaging code</u> P : 4" reel taping T : 7" reel taping A : 7" reel taping 15Kpcs D : 7" reel taping 20Kpcs E : 7" up side down taping V : 7" reel taping 1Kpcs Q : 10" reel taping G : 13" reel taping H : 0402-50K/13" reel R : 0603 2mm pitch taping B : Bulk K : Bulkcase C : Bulk after measuring	<u>Termination code</u> L = Sn base (Lead free) R = Pb ≤100ppm (total) W = Wide term.
WW	12	M	R002	F	T	L
<u>Type code</u> WW: R < 1Ω MW: R < 1Ω, AUTO SW: R < 1Ω, Anti-Sulfu	<u>Size code</u> 25 : 2512 (6432) 20 : 2010 (5025) 18 : 1218 (3248) 12 : 1206 (3216) 10 : 1210 (3225) 08 : 0805 (2012) 06 : 0603 (1608) 04 : 0402 (1005)	<u>Functional code</u> X : Thick film low ohm W : Thick film low ohm low TCR Q : Metal low ohm M : Metal low ohm R : Metal low ohm high power N : Metal low ohm high power P : Thick film low TCR high Power 2512 = 2W 2010 = 1W 1210 = 0.5W 1206 = 0.5W C : Thick film Power low ohm up side down	<u>Resistance</u> R followed by 3 significant digits e.g. : 0.1Ω = R100 0.033Ω = R033 0.56Ω = R560	<u>Tolerance</u> F : ± 1% G : ± 2% J : ± 5%	<u>Packaging code</u> P : 4" reel taping T : 7" reel taping Q : 10" reel taping G : 13" reel taping R : 0603 2mm pitch taping B : Bulk K : Bulkcase	<u>Termination code</u> L = Sn base (Lead free) G = Au base S = Ag base
WF	12	T	1001	B	T	L
<u>Type code</u> WF : Special function MF : Special function AUTO SF : Special function Anti-S WK: Special function made in KM	<u>Size code</u> 25 : 2512 (6432) 20 : 2010 (5025) 18 : 1218 (3248) 12 : 1206 (3216) 10 : 1210 (3225) 08 : 0805 (2012) 06 : 0603 (1608) 04 : 0402 (1005)	<u>Functional code</u> G : High ohm (>10MΩ) H : Thick film, High Precision <1% K : Thick film, TCR50ppm M : Trimmable P : High Power S : Surge T : Thin film, TCR50ppm U : Thin film, TCR25ppm Q : Thin film, TCR50ppm, power R : Thin film, TCR25ppm, power F : Thin film TCR15ppm W : Thin film TCR10ppm Z : Thin film TCR 5ppm V : High voltage X : Special resistance Y : E24/E96 resistance with special termination	<u>Resistance</u> E24(J tol.) : 2 significant digits followed by No. of zeros and a blank e.g. : 3ohm = 3R0_ 10ohm = 100_ 220ohm = 221_ 56Kohm = 563_ (" " means blank) E24+E96 (F tol.) : 3 significant digits followed by No. of zeros e.g. : 3Ω = 3R00 10Ω = 10R0 220Ω = 2200 56KΩ = 5602	<u>Tolerance</u> A : ± 0.05% B : ± 0.1% C : ± 0.25% D : ± 0.5% F : ± 1% G : ± 2% J : ± 5% K : ± 10% L : ± 15% M : ± 20% P : Jumper X : 0/-30% Y : 0/-20% Z : 0/-10%	<u>Packaging code</u> P : 4" reel taping T : 7" reel taping Q : 10" reel taping G : 13" reel taping R : 0603 2mm pitch taping B : Bulk K : Bulkcase D : 7" reel taping 20Kpcs V : 7" reel taping 1Kpcs	<u>Termination code</u> L = Sn base (Lead free) G = Au base S = Ag base C = Cu base D = Cu base + Low profile
WA	04	X	103_	J	T	L
<u>Type code</u> WA: Array MA: Convex Array Auto SA: Concave Array Anti-Sulfu	<u>Size code</u> 06 : 0603 (1608) 04 : 0402 (1005) 02 : 0201 (0603)	<u>Functional code</u> X : *4, convex Y : *2, convex W : *8, convex T : *4, concave U : *2, concave P : *3, convex (Attenuator) A: *4, FLAT B: *2, FLAT	<u>Resistance</u> E24(J tol.) : 2 significant digits followed by No. of zeros and a blank e.g. : 3ohm = 3R0_ 10ohm = 100_ 220ohm = 221_ 56Kohm = 563_ (" " means blank) E24+E96 (F tol.) : 3 significant digits followed by No. of zeros e.g. : 3Ω = 3R00 10Ω = 10R0 220Ω = 2200 56KΩ = 5602	<u>Tolerance</u> F : ± 1% J : ± 5% P : Jumper	<u>Packaging code</u> T : 7" reel taping Q : 10" reel taping G : 13" reel taping B : Bulk K : Bulkcase A : 7" reel taping 15Kpcs	<u>Termination code</u> L = Sn base (Lead free)
WT	04	X	103_	J	T	L
<u>Type code</u> T : Network Resistors	<u>Size code</u> 04 : total package size 1206 (3216)	<u>Functional code</u> X : *8, convex	<u>Resistance</u> E24(J tol.) : 2 significant digits followed by No. of zeros and a blank e.g. : 3ohm = 3R0_ 10ohm = 100_ 220ohm = 221_ 56Kohm = 563_ (" " means blank)	<u>Tolerance</u> J : ± 5% P : Jumper	<u>Packaging code</u> T : 7" reel taping B : Bulk	<u>Termination code</u> L = Sn base (Lead free)

Remark :

- Detail product part number, functional code, tolerance combination,..... please refer to specific data sheet.
- Example : (" " means a blank)
Chip-R 0805 size, 4.3ohm, 5%, Normal type, SnPb termination, 5000pcs taped in reel : WR08X4R3_JTL
- 1218 standard packing q'ty is 3Kpcs in 10" reel and packing code is T code

Chip Resistor Selection Guide

General Purpose Chip-R

Series	Size	Rated Power	TCR (ppm/°C)*	Tolerance	Resistance
WR25X	2512 (6432)	1W	±100 ±200	±1% ±5%	1 ~ 10MΩ
WR18X	1218 (3248)	1W	±100 ±200	±1% ±5%	
WR20X	2010 (5025)	1/2W	±100 ±200	±1% ±5%	
WR10X	1210 (3225)	1/3W	±100 ±200	±1% ±5%	
WR12X	1206 (3216)	1/4W	±100 ±200	±1% ±5%	
WR08X	0805 (2012)	1/8W	±100 ±200	±1% ±5%	
WR06X	0603 (1608)	1/10W	±100 ±200	±1% ±5%	
WR04X	0402 (1005)	1/16W	±100 ±200	±1% ±5%	
WR02X	0201 (0603)	1/20W	±200 ±200	±1% ±5%	
WR01X	01005 (0402)	1/32W	±200 ±200	±1% ±5%	
					4.7 ~ 1MΩ

Remark:

1. Detailed resistance vs. TCR and ordering code please refer to specific specifications.
2. Jumper resistor is not designed for fusing applications, designers shall apply dedicate fusible resistor or standard fuse in application circuits.

Thick Film Low Ohm Chip-R

Series	Size	Rated Power	TCR (ppm/°C)	Tolerance	Resistance
WW25X	2512 (6432)	1W	≤ 1500**	±1% ±5%	0.020Ω ~ 0.976Ω 0.015Ω ~ 0.976Ω
WW18X	1218 (3248)	1W		±1% ±5%	0.020Ω ~ 0.976Ω 0.015Ω ~ 0.976Ω
WW20X	2010 (5025)	1/2W		±1% ±5%	0.020Ω ~ 0.976Ω 0.015Ω ~ 0.976Ω
WW10X	1210 (3225)	1/3W		±1% ±5%	0.020Ω ~ 0.976Ω 0.020Ω ~ 0.976Ω
WW12X	1206 (3216)	1/4W	≤ 1500**	±1% ±5%	0.020Ω ~ 0.976Ω 0.020Ω ~ 0.976Ω
WW08X	0805 (2012)	1/8W	≤ 1500**	±1% ±5%	0.020Ω ~ 0.976Ω 0.020Ω ~ 0.976Ω
WW06X	0603 (1608)	1/10W	≤ 500**	±1% ±5%	0.100Ω ~ 0.976Ω 0.100Ω ~ 0.976Ω
WW04X	0402 (1005)	1/16W	≤ 600**	±1% ±5%	0.100Ω ~ 0.976Ω 0.100Ω ~ 0.976Ω

Remark:

1. Detailed resistance vs. TCR and ordering code please refer to specific specifications.
2. Resistance value will be changed by soldering condition and design of soldering pad, please design products in consideration of this change.

Thick Film Power Low Ohm Chip-R

Series	Size	Rated Power	TCR (ppm/°C)	Tolerance	Resistance
WW25P	2512 (6432)	2W	< 0.1Ω: 150ppm ≥ 0.1Ω: 100ppm	±1% ±5%	0.047Ω ~ 0.976Ω 0.047Ω ~ 0.976Ω
WW20P	2010 (5025)	1W	< 0.1Ω: 150ppm ≥ 0.1Ω: 100ppm	±1% ±5%	0.047Ω ~ 0.976Ω 0.047Ω ~ 0.976Ω
WW10P	1210 (3225)	1/2W	< 0.1Ω: 500ppm ≥ 0.1Ω: 200ppm	±1% ±5%	0.020Ω ~ 0.976Ω 0.020Ω ~ 0.976Ω
WW12P	1206 (3216)	1/2W	< 0.1Ω: 200ppm ≥ 0.1Ω: 100ppm	±1% ±5%	0.047Ω ~ 0.976Ω 0.047Ω ~ 0.976Ω
WW08P	0805 (2012)	1/3W	< 0.1Ω: 200ppm ≥ 0.1Ω: 150ppm	±1% ±5%	0.047Ω ~ 0.976Ω 0.047Ω ~ 0.976Ω
WW06P	0603 (1608)	1/4W	< 0.1Ω: 250ppm ≥ 0.1Ω: 200ppm	±1% ±5%	0.047Ω ~ 0.976Ω 0.047Ω ~ 0.976Ω
WW04P	0402 (1005)	1/8W	< 0.1Ω: 300ppm ≥ 0.1Ω: 200ppm	±1% ±5%	0.100Ω ~ 0.976Ω 0.100Ω ~ 0.976Ω
WW08C	0805 (2012)	1/3W	< 0.03Ω: 0~+250ppm ≥ 0.03Ω: ±150ppm	±1% ±5%	0.020 ~ 0.050Ω 0.020 ~ 0.050Ω
WW06C	0603 (1608)	1/4W	< 0.051Ω: 0~+250ppm ≥ 0.051Ω: ±150ppm	±1% ±5%	0.020 ~ 0.100Ω 0.020 ~ 0.100Ω
WW04C	0402 (1005)	1/8W	< 0.051Ω: 0~+350ppm ≥ 0.051Ω: ±150ppm	±1% ±5%	0.025 ~ 0.100Ω 0.025 ~ 0.100Ω

Metal Low Ohm Sensing Type Chip-R

Series	Size	Rated Power	TCR (ppm/°C)*	Tolerance	Resistance
WW25N	2512 (6432)	2W	±100	±1%, ±5%	1 ~ 25mΩ*
WW25R		2W	±100	±1%, ±5%	1, 2, 3, 4, 5, 6, 7, 10mΩ
WW25M		1W	±100	±1%, ±5%	1 ~ 50mΩ*
WW25Q		1W	±100	±1%, ±5%	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15mΩ
WW20N	2010 (5025)	1W	±75	±1%, ±5%	5, 10, 15, 20mΩ
WW12N	1206 (3216)	1W	±70	±1%, ±5%	5, 10, 15, 20, 25mΩ
WW12R		1W	±100	±1%, ±5%	1, 4, 5, 6, 8, 10, 15mΩ
WW12D		1W	±100	±1%, ±5%	20, 25, 30, 40, 50mΩ
WW08R	0805 (2012)	1/2W	±100	±1%, ±5%	4, 5, 10mΩ
WW08D	0805 (2012)	1/2W	±100	±1%, ±5%	20, 25, 30, 40, 50mΩ
WW06R	0603 (1608)	1/3W	±100	±1%, ±5%	5, 10, 15mΩ

Remark:

1. Detailed resistance vs. TCR and ordering code please refer to specific specifications.
2. Resistance value will be changed by soldering condition and design of soldering pad, please design products in consideration of this change.

Chip Resistor Array

Series	Size	Rated Power	TCR (ppm/°C)	Termination	Tolerance	Resistance
WA06X	1206 (0603x4)	1/10W	±200	Convex	±1%, ±5%	10 ~ 1MΩ
WA06T	1206 (0603x4)	1/10W	±200	Concave	±1%, ±5%	
WA06Y	0606 (0603x2)	1/10W	±200	Convex	±1%, ±5%	
WA04X	0804 (0402x4)	1/16W	±200	Convex	±1%, ±5%	
WA04T	0804 (0402x4)	1/16W	±300	Concave	±1%, ±5%	
WA04Y	0404 (0402x2)	1/16W	±200	Convex	±1%, ±5%	
WA04U	0404 (0402x2)	1/16W	±300	Concave	±1%, ±5%	
WA06W	1606 (0402x8)	1/16W	±200	Convex	±1%, ±5%	10 ~ 100KΩ
WA02Y	0806 (0201x2)	1/32W	±300	Convex	±1%, ±5%	10 ~ 1MΩ

Remark:

1. Detailed resistance vs. TCR and ordering code please refer to specific specifications.
2. Resistance value will be changed by soldering condition and design of soldering pad, please design products in consideration of this change.

Chip Attenuator

Series	Size	Type	Termination	Tolerance	Attenuation	Impedance
WA04P	0404 (0402x2)	4P3R, Π type	Convex	±0.1dB ~ 2.5dB	0, 0.5dB ~ 20dB	50Ω

Chip Resistor Network

Series	Size	Rated Power	TCR (ppm/°C)	Termination	Tolerance	Resistance
WT04X	1206 (10P8R)	1/16W	±200	Convex	±5%	10 ~ 100KΩ

High Power Chip-R

Series	Size	Rated Power	TCR (ppm/°C)	Tolerance	Resistance
WF25P	2512 (6432)	2W	±100	±1%, ±5%	Jumper; 1 ~ 1MΩ
WF20P	2010 (5025)	1W	±100		
WF10P	1210 (3225)	1/2W	±100		
WF12P	1206 (3216)	1/2W	±100		
WF08P	0805 (2012)	1/4W	±100		
WF06P	0603 (1608)	1/8W	±100		
WF04P	0402 (1005)	1/8W	±100		

Automotive Chip-R

Series	Size	Rated Power	TCR(ppm/°C)	Tolerance	Resistance
MR12	1206 (3216)	1/4W	±200	±1%, ±5%	1~ 10MΩ
MR08	0805 (2012)	1/8W	±200		1~ 10MΩ
MR06	0603 (1608)	1/10W	±200		1~ 10MΩ
MR04	0402 (1005)	1/16W	±200		1~ 10MΩ

Anti-Sulfuration Chip-R

Series	Size	Rated Power	TCR(ppm/°C)	Tolerance	Resistance
SR12	1206 (3216)	1/4W	≤ 200	±1%, ±5%	1~ 10MΩ
SR08	0805 (2012)	1/8W	≤ 200	±1%, ±5%	1~ 10MΩ
SR06	0603 (1608)	1/10W	≤ 200	±1%, ±5%	1~ 10MΩ
SR04	0402 (1005)	1/16W	≤ 200	±1%, ±5%	1~ 10MΩ

Surge Chip-R

Series	Size	Rated Power	TCR(ppm/°C)	Tolerance	Resistance
WK25S	2512 (6432)	1W	≤ 200	±5%, ±10%	0.27 ~ 22MΩ
WK20S	2010 (5025)	3/4W	≤ 200	±5%, ±10%	0.27 ~ 22MΩ
WK10S	1210 (3225)	1/2W	≤ 200	±5%, ±10%	0.27 ~ 22MΩ
WK12S	1206 (3216)	1/4W	≤ 200	±5%, ±10%	0.27 ~ 22MΩ
WK08S	0805 (2012)	1/8W	≤ 200	±5%, ±10%	0.27 ~ 22MΩ

High Voltage Chip-R

Series	Size	Rated Power	TCR(ppm/°C)	Voltage (V)	Tolerance	Resistance
WK25Z	2512 (6432)	1W	≤ 200	2000	±5%, ±10%, ±20%	4.7M ~ 16MΩ
WK20Z	2010 (5025)	1/2W	≤ 200	1500	±5%, ±10%, ±20%	1M ~ 16MΩ
WK25V	2512 (6432)	1W	≤ 200	800	±1%, ±5%	47~ 51MΩ
WK20V	2010 (5025)	1/2W	≤ 200	500	±1%, ±5%	47~ 51MΩ
WK12V	1206 (3216)	1/4W	≤ 200	500	±1%, ±5%	47~ 51MΩ
WK08V	0805 (2012)	1/8W	≤ 200	400	±1%, ±5%	47~ 51MΩ
WK06V	0603 (1608)	1/10W	≤ 200	200	±1%, ±5%	47~ 10MΩ

Trimmable Chip-R

Series	Size	Rated Power	TCR(ppm/°C)	Tolerance	Resistance
WK25M	2512 (6432)	1W	≤ 200	0/-20%, 0/-30%	1 ~ 4.7MΩ
WK20M	2010 (5025)	1/2W	≤ 200	0/-20%, 0/-30%	1 ~ 4.7MΩ
WK10M	1210 (3225)	1/4W	≤ 200	0/-20%, 0/-30%	1 ~ 4.7MΩ
WK12M	1206 (3216)	1/8W	≤ 200	0/-20%, 0/-30%	1 ~ 4.7MΩ
WK08M	0805 (2012)	1/10W	≤ 200	0/-20%, 0/-30%	1 ~ 4.7MΩ
WK06M	0603 (1608)	1/16W	≤ 100	0/-20%, 0/-30%	10~ 4.7MΩ

Total lead free Chip-R (Pb < 100ppm)

Series	Size	Rated Power	TCR(ppm/°C)	Tolerance	Resistance
WR12X_R	1206 (3216)	1/4W	≤ 200	±1%, ±5%	1~ 10MΩ
WR08X_R	0805 (2012)	1/8W	≤ 200	±1%, ±5%	1~ 10MΩ
WR06X_R	0603 (1608)	1/10W	≤ 200	±1%, ±5%	1~ 10MΩ
WR04X_R	0402 (1005)	1/16W	≤ 200	±1%, ±5%	1~ 10MΩ
WA04X_R	0402X4	1/16W	≤ 200	±1%, ±5%	10 ~ 1MΩ
WA04Y_R	0402X2	1/16W	≤ 200	±1%, ±5%	10 ~ 1MΩ

High Precision Chip-R

Series	Size	Rated Power	TCR(ppm/°C)	Tolerance	Resistance
WF12H	1206 (3216)	1/4W	≤ 100	±0.1%, ±0.5%	10 ~ 1MΩ
WF08H	0805 (2012)	1/8W	≤ 100	±0.1%, ±0.5%	10 ~ 1MΩ
WF06H	0603 (1608)	1/10W	≤ 100	±0.1%, ±0.5%	10 ~ 1MΩ
WF04H	0402 (1005)	1/16W	≤ 100	±0.1%, ±0.5%	10 ~ 1MΩ
WF25T	2512 (6432)	3/4W	≤ 50	±0.05%, ±0.10%, ±0.25%, ±0.50%, ±1.0%	10 ~ 1.5MΩ
WF25Q	2512 (6432)	1W	≤ 50	±0.05%, ±0.10%, ±0.25%, ±0.50%, ±1.0%	10 ~ 1.5MΩ
WF20T	2010 (5025)	1/2W	≤ 50	±0.05%, ±0.10%, ±0.25%, ±0.50%, ±1.0%	10 ~ 1.5MΩ
WF20Q	2010 (5025)	3/4W	≤ 50	±0.05%, ±0.10%, ±0.25%, ±0.50%, ±1.0%	10 ~ 1.5MΩ
WF10T	1210 (3225)	1/4W	≤ 50	±0.05%, ±0.10%, ±0.25%, ±0.50%, ±1.0%	10 ~ 1MΩ
WF10Q	1210 (3225)	2/5W	≤ 50	±0.05%, ±0.10%, ±0.25%, ±0.50%, ±1.0%	10 ~ 1MΩ
WF12T	1206 (3216)	1/8W	≤ 50	±0.05%, ±0.10%, ±0.25%, ±0.50%, ±1.0%	4.7 ~ 1MΩ
WF12Q	1206 (3216)	1/4W	≤ 50	±0.05%, ±0.10%, ±0.25%, ±0.50%, ±1.0%	4.7 ~ 1MΩ
WF08T	0805 (2012)	1/10W	≤ 50	±0.05%, ±0.10%, ±0.25%, ±0.50%, ±1.0%	4.7 ~ 1MΩ
WF08Q	0805 (2012)	1/8W	≤ 50	±0.05%, ±0.10%, ±0.25%, ±0.50%, ±1.0%	4.7 ~ 1MΩ
WF06T	0603 (1608)	1/16W	≤ 50	±0.05%, ±0.10%, ±0.25%, ±0.50%, ±1.0%	4.7 ~ 680KΩ
WF06Q	0603 (1608)	1/10W	≤ 50	±0.05%, ±0.10%, ±0.25%, ±0.50%, ±1.0%	4.7 ~ 680KΩ
WF04T	0402 (1005)	1/16W	≤ 50	±0.05%, ±0.10%, ±0.25%, ±0.50%, ±1.0%	10 ~ 100KΩ
WF25U	2512 (6432)	3/4W	≤ 25	±0.05%, ±0.10%, ±0.25%, ±0.50%, ±1.0%	10 ~ 1.5MΩ
WF25R	2512 (6432)	1W	≤ 25	±0.05%, ±0.10%, ±0.25%, ±0.50%, ±1.0%	10 ~ 1.5MΩ
WF20U	2010 (5025)	1/2W	≤ 25	±0.05%, ±0.10%, ±0.25%, ±0.50%, ±1.0%	10 ~ 1.5MΩ
WF20R	2010 (5025)	3/4W	≤ 25	±0.05%, ±0.10%, ±0.25%, ±0.50%, ±1.0%	10 ~ 1.5MΩ
WF10U	1210 (3225)	1/4W	≤ 25	±0.05%, ±0.10%, ±0.25%, ±0.50%, ±1.0%	10 ~ 1MΩ
WF10R	1210 (3225)	2/5W	≤ 25	±0.05%, ±0.10%, ±0.25%, ±0.50%, ±1.0%	10 ~ 1MΩ
WF12U	1206 (3216)	1/8W	≤ 25	±0.05%, ±0.10%, ±0.25%, ±0.50%, ±1.0%	4.7 ~ 1MΩ
WF12R	1206 (3216)	1/4W	≤ 25	±0.05%, ±0.10%, ±0.25%, ±0.50%, ±1.0%	4.7 ~ 1MΩ
WF08U	0805 (2012)	1/10W	≤ 25	±0.05%, ±0.10%, ±0.25%, ±0.50%, ±1.0%	4.7 ~ 1MΩ
WF08R	0805 (2012)	1/8W	≤ 25	±0.05%, ±0.10%, ±0.25%, ±0.50%, ±1.0%	4.7 ~ 1MΩ
WF06U	0603 (1608)	1/16W	≤ 25	±0.05%, ±0.10%, ±0.25%, ±0.50%, ±1.0%	4.7 ~ 680KΩ
WF06R	0603 (1608)	1/10W	≤ 25	±0.05%, ±0.10%, ±0.25%, ±0.50%, ±1.0%	4.7 ~ 680KΩ
WF04U	0402 (1005)	1/16W	≤ 25	±0.05%, ±0.10%, ±0.25%, ±0.50%, ±1.0%	10 ~ 100KΩ
WF12F	1206 (3216)	1/8W	≤ 15	±0.05%, ±0.10%, ±0.25%	100 ~ 200KΩ
WF08F	0805 (2012)	1/8W	≤ 15	±0.05%, ±0.10%, ±0.25%	100 ~ 200KΩ
WF06F	0603 (1608)	1/10W	≤ 15	±0.05%, ±0.10%, ±0.25%	100 ~ 100KΩ
WF04F	0402 (1005)	1/16W	≤ 15	±0.05%, ±0.10%, ±0.25%	100 ~ 20KΩ
WF12W	1206 (3216)	1/8W	≤ 10	±0.05%, ±0.10%, ±0.25%	25 ~ 300KΩ
WF08W	0805 (2012)	1/8W	≤ 10	±0.05%, ±0.10%, ±0.25%	25 ~ 200KΩ
WF06W	0603 (1608)	1/10W	≤ 10	±0.05%, ±0.10%, ±0.25%	25 ~ 100KΩ
WF04W	0402 (1005)	1/16W	≤ 10	±0.05%, ±0.10%, ±0.25%	25 ~ 20KΩ
WF12Z	1206 (3216)	1/8W	≤ 5	±0.05%, ±0.10%, ±0.25%	25 ~ 120KΩ
WF08Z	0805 (2012)	1/8W	≤ 5	±0.05%, ±0.10%, ±0.25%	25 ~ 80KΩ
WF06Z	0603 (1608)	1/10W	≤ 5	±0.05%, ±0.10%, ±0.25%	25 ~ 40KΩ
WF04Z	0402 (1005)	1/16W	≤ 5	±0.05%, ±0.10%, ±0.25%	25 ~ 8KΩ