EXPLANATIONS OF ORDERING CODE

MFR	-12	F	T	F	52-	100R

Code 1 - 3
Series Name
See Index

Code 4 - 6
Power Rating

-05 = ød0.5mm
-06 = ød0.6mm
-07 = ød0.7mm
-08 = ød0.8mm
-10 = ød1.0mm
-14 = ød1.4mm
-12 = 1/6W
-25 = 1/4W
25S = 1/4WS
-50 = 1/2W
50S = 1/2WS
100 = 1W
1WS = 1WS
200 = 2W
2WS = 2WS
204 = 0.4W
207 = 0.6W
300 = 3W
3WS = 3WS
3WM = 3WM
400 = 4W
500 = 5W
5WS = 5WS
5SS = 5WSS
700 = 7W
7WS = 7WS
10A = 10W
20A = 20W
30A = 30W
40A = 40W
50A = 50W
10S = 10WS
15A = 15W
25A = 25W
10B = 100W
25B = 250W
1SS = 1WSS
2SS = 2WSS

Code 7
Tolerance

P = ±0.02 %
A = ±0.05 %
B = ±0.1 %
C = ±0.25%
D = ±0.5 %
F = ±1 %
G = ±2 %
J = ±5 %
K = ±10 %
- = Base on Spec.

Code 8
Packing Style

T = Tape/Box
R = Tape/Reel
B = Bulk

Code 9
Temperature Coefficient of Resistance

- = Base on Spec.
A = ±5 ppm/°C
B = ±10 ppm/°C
C = ±15 ppm/°C
S = ± 20ppm/°C
D = ±25 ppm/°C
E = ±50 ppm/°C
F = ±100 ppm/°C
G = ±200 ppm/°C
H = ±250 ppm/°C
I = ±300 ppm/°C
J = ±350 ppm/°C

Code 10 - 12
Forming Type

26- = 26mm
52- = 52.4mm
73- = 73mm
81- = 81mm
91- = 91mm
F = F Type
FK = FK Type
FKK = FKK Type
FFK = F-form Kink
M = M-Type Forming
MB = M-form W/flat
MT = MT Type Forming
MR = MR Type
AV = AVIsert
PN = PANAsert

Code 13 - 17
Resistance Value

0R1 = 0.1
100R = 100
10K = 10,000
10M = 10,000,000

EXCEPTION:

• Cement series:

<Code 8>: Special packing style code
B: Bulk with wirewound or metal oxide sub-assembly for resistance value
W: Bulk with ceramic based wirewound sub-assembly for resistance value
M: Bulk with metal oxide sub-assembly for resistance value
F: Bulk with Fiberglass based wirewound sub-assembly for resistance value

<Code 10-12>: Without forming code

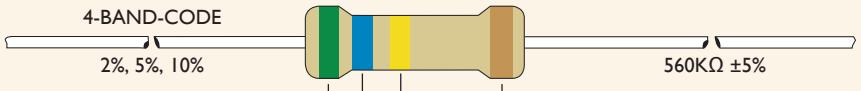
Example: **SQP500JB-10R**

• JPW series:

<Code 13-17>: without resistance value code

Example: **JPW-06-T-52-**

MARKING AND STANDARD RESISTANCE VALUE FOR THE 10-TO-100 DECADE



COLOR	1st BAND	2nd BAND	3rd BAND	MULTIPLIER	TOLERANCE	
BLACK	0	0	0	1Ω		
BROWN	1	1	1	10Ω	±1%	(F)
RED	2	2	2	100Ω	±2%	(G)
ORANGE	3	3	3	1KΩ		
YELLOW	4	4	4	10KΩ		
GREEN	5	5	5	100KΩ	±0.5%	(D)
BLUE	6	6	6	1MΩ	±0.25%	(C)
VIOLET	7	7	7	10MΩ	±0.10%	(B)
GREY	8	8	8	0.001	±0.05%	
WHITE	9	9	9	0.0001		
GOLD				0.1	±5%	(J)
SILVER				0.01	±10%	(K)

STANDARD RESISTANCE VALUES FOR THE 10-TO-100 DECADE

(Also Usable in Decade Multiples or Sub-Multiples)

RESISTANCE TOLERANCE (±%)

0.10%		2%	0.10%		2%	0.10%		2%	0.10%		2%	0.10%		2%	0.10%		2%
0.25%	1%	5%	0.25%	1%	5%	0.25%	1%	5%	0.25%	1%	5%	0.25%	1%	5%	0.25%	1%	5%
0.50%		10%	0.50%		10%	0.50%		10%	0.50%		10%	0.50%		10%	0.50%		10%
10	10	10	14.7	14.7	-	21.5	21.5	-	31.6	31.6	-	46.4	46.4	-	68.1	68.1	68
10.1	-	-	14.9	-	-	21.8	-	-	32	-	-	47	-	47	69	-	-
10.2	10.2	-	15	15	15	22.1	22.1	22	32.4	32.4	-	47.5	47.5	-	69.8	69.8	-
10.4	-	-	15.2	-	-	22.3	-	-	32.8	-	-	48.1	-	-	70.6	-	-
10.5	10.5	-	15.4	15.4	-	22.6	22.6	-	33.2	33.2	33	48.7	48.7	-	71.5	71.5	-
10.6	-	-	15.6	-	-	22.9	-	-	33.6	-	-	49.3	-	-	72.3	-	-
10.7	10.7	-	15.8	15.8	-	23.2	23.2	-	34	34	-	49.9	49.9	-	73.2	73.2	-
10.9	-	-	16	-	16	23.4	-	-	34.4	-	-	50.5	-	-	74.1	-	-
11	11	11	16.2	16.2	-	23.7	23.7	-	34.8	34.8	-	51.1	51.1	51	75	75	75
11.1	-	-	16.4	-	-	24	-	24	35.2	-	-	51.7	-	-	75.9	-	-
11.3	11.3	-	16.5	16.5	-	24.3	24.3	-	35.7	35.7	-	52.3	52.3	-	76.8	76.8	-
11.4	-	-	16.7	-	-	24.6	-	-	36.1	-	36	53	-	-	77.7	-	-
11.5	11.5	-	16.9	16.9	-	24.9	24.9	-	36.5	36.5	-	53.6	53.6	-	78.7	78.7	-
11.7	-	-	17.2	-	-	25.2	-	-	37	-	-	54.2	-	-	79.6	-	-
11.8	11.8	-	17.4	17.4	-	25.5	25.5	-	37.4	37.4	-	54.9	54.9	-	80.6	80.6	-
12	-	12	17.6	-	-	25.8	-	-	37.9	-	-	55.6	-	-	81.6	-	-
12.1	12.1	-	17.8	17.8	-	26.1	26.1	-	38.3	38.3	-	56.2	56.2	56	82.5	82.5	82
12.3	-	-	18	-	18	26.4	-	-	38.8	-	-	56.9	-	-	83.5	-	-
12.4	12.4	-	18.2	18.2	-	26.7	26.7	-	39.2	39.2	39	57.6	57.6	-	84.5	84.5	-
12.6	-	-	18.4	-	-	27.1	-	27	39.7	-	-	58.3	-	-	85.6	-	-
12.7	12.7	-	18.7	18.7	-	27.4	27.4	-	40.2	40.2	-	59	59	-	86.6	86.6	-
12.9	-	-	18.9	-	-	27.7	-	-	40.7	-	-	59.7	-	-	87.6	-	-
13	13	13	19.1	19.1	-	28	28	-	41.2	41.2	-	60.4	60.4	-	88.7	88.7	-
13.2	-	-	19.3	-	-	28.4	-	-	41.7	-	-	61.2	-	-	89.8	-	-
13.3	13.3	-	19.6	19.6	-	28.7	28.7	-	42.2	42.2	-	61.9	61.9	62	90.9	90.9	91
13.5	-	-	19.8	-	-	29.1	-	-	42.7	-	-	62.6	-	-	92	-	-
13.7	13.7	-	20	20	20	29.4	29.4	-	43.2	43.2	43	63.4	63.4	-	93.1	93.1	-
13.8	-	-	20.3	-	-	29.8	-	-	43.7	-	-	64.2	-	-	94.2	-	-
14	14	-	20.5	20.5	-	30.1	30.1	30	44.2	44.2	-	64.9	64.9	-	95.3	95.3	-
14.2	-	-	20.8	-	-	30.5	-	-	44.8	-	-	65.7	-	-	96.5	-	-
14.3	14.3	-	21	21	-	30.9	30.9	-	45.3	45.3	-	66.5	66.5	-	97.6	97.6	-
14.5	-	-	21.3	-	-	31.2	-	-	45.9	-	-	67.3	-	-	98.8	-	-
E-192	E-96	E-24	E-192	E-96	E-24	E-192	E-96	E-24	E-192	E-96	E-24	E-192	E-96	E-24	E-192	E-96	E-24