

SURFACE MOUNT

- Exceptionally low tolerance
- 0402 and 2512 size
- Low noise performance
- Highly suited for audio amongst others

SURFACE MOUNT THIN FILM CHIP RESISTORS RTF

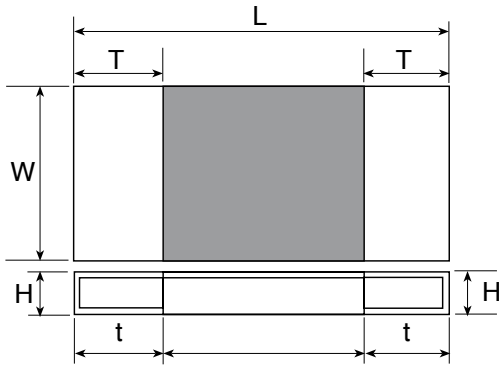


RATING

Size Code	Power Rating	Max. Working Voltage	Max. Overload Voltage	Tolerance	Operating Temp Range
0402	1/16w	50v	100v	1% 0.5% 0.25% 0.1%	-55°C to +125°C
0603	1/10w	75v	150v	1% 0.5% 0.25% 0.1%	-55°C to +125°C
0805	1/8w	150v	300v	1% 0.5% 0.25% 0.1%	-55°C to +125°C
1206	1/8w	200v	400v	1% 0.5% 0.25% 0.1%	-55°C to +125°C
2010	1/2w	200v	400v	1% 0.5% 0.25% 0.1%	-55°C to +125°C
2512	3/4w	200v	400v	1% 0.5% 0.25% 0.1%	-55°C to +125°C

Size Code	Resistance Range	TCR
0402	10Ω to 121kΩ	10ppm (on request) 15ppm (on request) 25ppm 50ppm
0603	3Ω to 681kΩ	
0805	3Ω to 1.5MΩ	
1206	3Ω to 1.5MΩ	
2010	10Ω to 1MΩ	
2512	10Ω to 1MΩ	

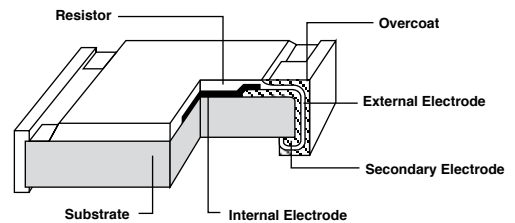
OUTLINE DRAWING



Range	Size Code	Length L/mm	Width W/mm	Height H/mm	Terminal T/mm
RTF04	0402	1.00 ± 0.1	0.5 ± 0.05	0.35 ± 0.05	0.2 ± 0.1
RTF16	0603	1.60 ± 0.1	0.8 ± 0.1	0.45 ± 0.1	0.25 ± 0.15
RTF12	0805	2.00 ± 0.1	1.25 ± 0.1	0.5 ± 0.1	0.35 ± 0.2
RTF25	1206	3.10 ± 0.1	1.60 ± 0.1	0.55 ± 0.1	0.45 ± 0.2
RTF50	2010	5.00 ± 0.1	2.5 ± 0.15	0.55 ± 0.1	0.6 ± 0.2
RTF100	2512	6.35 ± 0.1	3.2 ± 0.15	0.55 ± 0.1	0.6 ± 0.2

Dimensions in mm

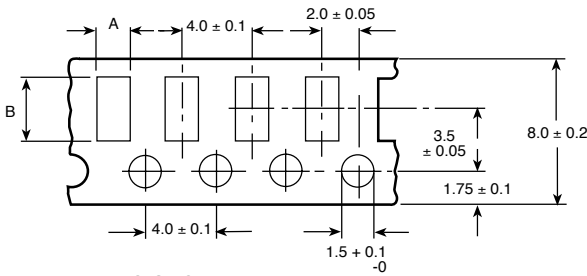
CONSTRUCTION



ORDERING INFORMATION

RTF	12	102	A	
Range	Size	Value	Tolerance	Blank = 50ppm 25ppm = 25ppm 15ppm = 15ppm 10ppm = 10ppm
	04 = 0402 12 = 0805 16 = 0603 25 = 1206 50 = 2010 100 = 2512		A = ±0.1% B = ±0.5% C = ±0.25% F = ±1%	

PACKAGING DIMENSIONS FOR BOTH RTF & RPC RANGE



TAPE DIMENSIONS (mm)

Dims.	0402	0603	0805	1206	1210	2010	2512
A	0.65±0.1	1.1±0.1	1.65±0.1	1.9±0.1	2.8±0.1	2.8±0.2	3.6±0.2
B	1.15±0.1	1.9±0.1	2.4±0.1	3.5±0.1	3.5±0.1	5.6±0.2	6.7±0.2

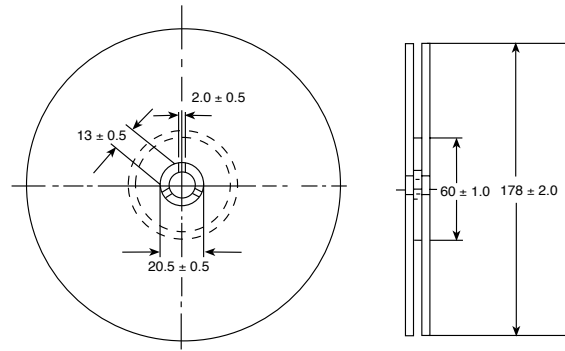
Tape packaging: 8mm width paper taping based on EIAJ RC-1009B, 5000pcs per reel.

MARKING EXPLANATION

5%, 3 digits, 1st two digits are significant figures, 3rd digit is number of zeros.

R =decimal point

1%, 4 digits, 1st three digits are significant figures, 4th digit is number of zeros.



REEL DIMENSION (mm)

Reel Size(max)	0402	0603	0805	1206	1210	2010	2512
7" (178mm)	10000	5000	5000	5000	5000	4000	2000
13" (330mm)	40000	20000	20000	20000	20000	-	-

Chip Resistors	Marking Explanation
103 5% marking Value=10KΩ 0603,0805,1206, 1210,2010,2512 1002 1% marking Value=10KΩ 0805,1206,1210 2010,2512	5% tolerance :3 digits, First two digits are significant figures, third digit is number of zeros. 1% tolerance :4 digits, first three digits are significant figures, fourth digit is number of zeros. Letter R is decimal point.
10C 1% marking Value=12.4KΩ 0803 0402 no marking	Letter "0" is 0 ohm.0603 1% :EIA-96 marking. (as the below list). 0402 no marking.
R020 Value=20mΩ	Standard MIL resistance marking. "R" signifies Decimal place.

Code	R Value	Code	R Value	Code	R Value	Code	R Value	Code	R Value	Code	R Value	Code	R Value
01	100	13	133	25	178	37	237	49	316	61	422	73	562
02	102	14	137	26	182	38	243	50	324	62	462	74	576
03	105	15	140	27	187	39	249	51	332	63	442	75	590
04	107	16	143	28	191	40	255	52	340	64	453	76	604
05	110	17	147	29	196	41	261	53	348	65	464	77	619
06	113	18	150	30	200	42	267	54	357	66	475	78	634
07	155	19	154	31	205	43	274	55	365	67	487	79	649
08	118	20	158	32	210	44	280	56	374	68	499	80	665
09	121	21	162	33	215	45	287	57	383	69	511	81	681
10	124	22	165	34	221	46	294	58	392	70	523	82	698
11	127	23	169	35	226	47	301	59	402	71	536	83	715
12	130	24	174	36	232	48	309	60	412	72	549	84	732
				96	976								

This table shows the first two digits for the three-digit EIA-96 part marking scheme.

The third character is a letter multiplier: Y=10⁻² X=10⁻¹ A=10⁰ B=10¹ C=10² D=10³ E=10⁴ F=10⁵