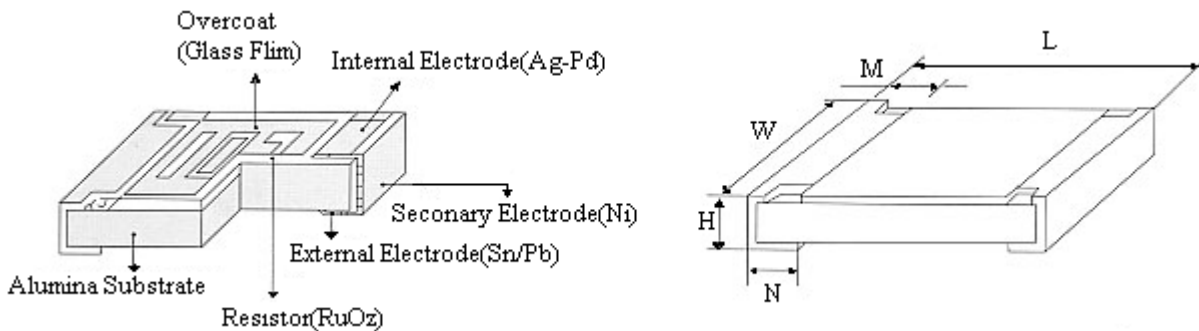


CONSTRUCTION AND DIMENSIONS

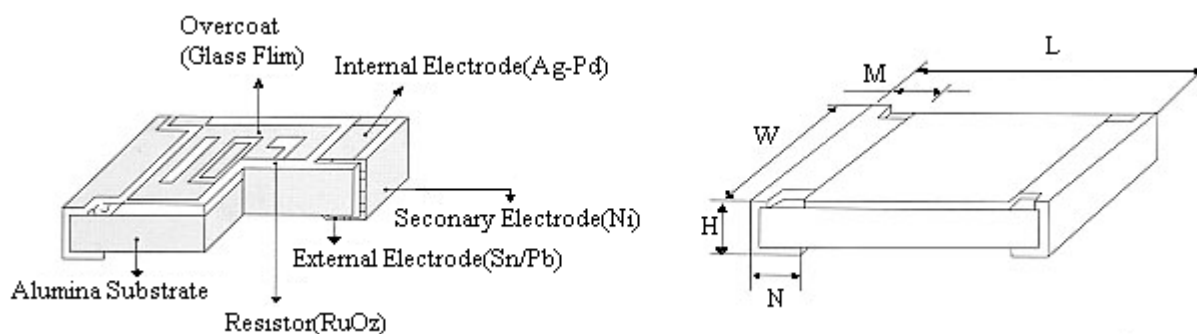


Type	Dimensions (mm)					Inch
	L	W	H	M	N	
RR1005	1.00±0.10	0.50±0.05	0.35±0.05	0.20±0.10	0.25±0.10	0402
RR1608	1.60±0.15	0.80±0.15	0.50±0.15	0.30±0.15	0.30±0.15	0603
RR2012	2.00±0.15	1.25±0.15	0.50±0.15	0.40±0.25	0.40±0.25	0805
RR3216	3.20±0.15	1.60±0.15	0.55±0.15	0.50±0.25	0.50±0.25	1206

ELECTRICAL CHARACTERISTICS

Item	RR1005		RR1608		RR2012		RR3216	
Power Rating at 70°C	1/32w	1/16w	1/16w	1/10w	1/10w	1/8w	1/8w	1/4w
Operating Temperature Range	-55°C ~ +125°C							
Max working voltage	50V	25V	50V	100V	100V	200V	200V	400V
Max overload voltage	100V	50V	100V	100V	200V	200V	400V	400V
Resistance range	10 Ω - 1M Ω		10 Ω - 1M Ω		10 Ω - 1M Ω		10 Ω - 1M Ω	
±5% E24	100 Ω - 1M Ω		100 Ω - 1M Ω		100 Ω - 1M Ω		100 Ω - 1M Ω	
±1% E96								
TCR	±250ppm/°C		±100ppm/°C		±200ppm/°C			
	10 Ω - 100 Ω		<10 Ω		±250ppm/°C			
	±500ppm/°C		>1M Ω		±200ppm/°C			
Chip Jumper	≤50m Ω							

CONSTRUCTION AND DIMENSIONS



Type	Dimensions (mm)					Inch
	L	W	H	M	N	
RR3225	3.20±0.15	2.50±0.15	0.55±0.15	0.50±0.25	0.50±0.25	1210
RR5025	5.00±0.15	2.50±0.15	0.55±0.15	0.60±0.25	0.60±0.25	2010
RR6332	6.35±0.20	3.20±0.15	0.55±0.15	0.60±0.25	0.50±0.25	2512

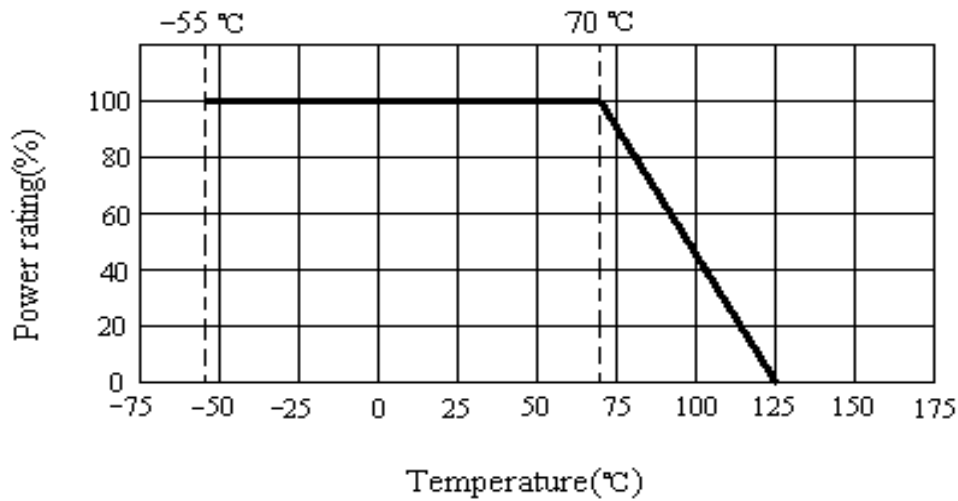
ELECTRICAL CHARACTERISTICS

Item	RR3225	RR5025	RR6332
Power Rating at 70°C	1/4w	1/2w	1w
Operating Temperature Range		-55°C ~ +125°C	
Max working voltage	200V	200V	200V
Max overload voltage	400V	400V	400V
Resistance range ±5% E24 ±1% E96		10 Ω ~ 10M Ω 100 Ω ~ 1M Ω	
TCR	± 100ppm/°C		± 200ppm/°C
	< 10 Ω	± 250ppm/°C	
	> 1M Ω	± 250ppm/°C	
Chip Jumper	≤ 50m Ω		



RR SERIES THICK FILM CHIP RESISTORS

Power Derating Curve



Rated working voltage is calculated according to the following formula:

$$U = \sqrt{PR}$$

U: Rated working voltage

P: Power rating

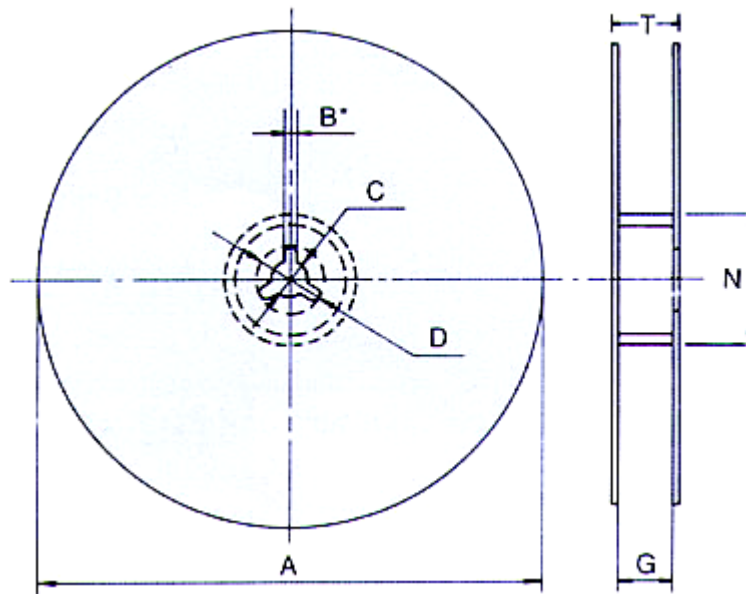
R: Resistance value

Rated working voltage shall not be higher than max working voltage.

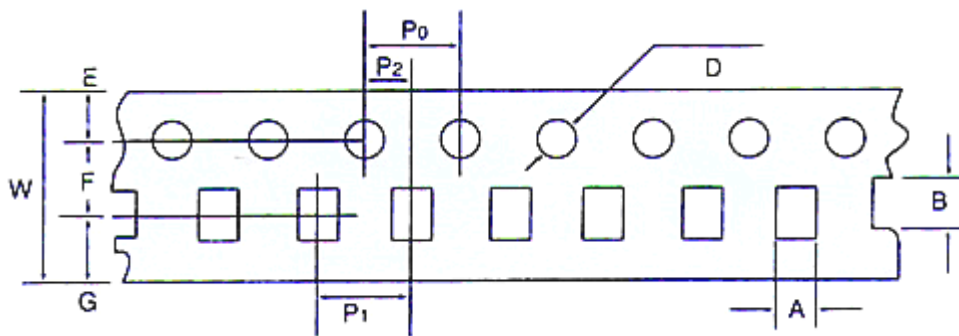
CHATACTERISTICS

Item	Specification		Test Method
	K	L	
TCR	±100ppm/°C	±200ppm/°C	-55°C+125°C
Short Time Overload	±0.5%R+0.05 Ω	±0.5%R+0.05 Ω	2.5U _R or 2U _R max 2s
Plating Bond Strength of Terminal	±0.5%R+0.05 Ω	±0.5%R+0.05 Ω	IEC115-1
Resistance to Soldering Heat	±0.5%R+0.05 Ω	±0.5%R+0.05 Ω	260°C ±5°C 10s
Thermal Shock	±0.5%R+0.05 Ω	±0.5%R+0.05 Ω	-55°C 125°C 5CYCLES
Climatic (Sequence)	±3%R+0.1 Ω	±3%R+0.1 Ω	IEC115-1
Damp-Heat (Steady State)	±3%R+0.1 Ω	±3%R+0.1 Ω	IEC115-1
Life	±1%R+0.05 Ω	±3%R+0.1 Ω	70°C U _R 1000hrs
Solderability	Wet area shall be more than 95%		IEC115-1

Taping is in accordance with EIA RS-481



Type	Packing Material	Tape Wide	A	N	C	D	B	G	T
RR1005/1608/ 2012/3216/3225	Paper Taping	8mm	178 ± 2.0	80.0 ± 0.2	13.0 ± 0.5	20 min	2.5 ± 0.5	9.0 ± 1.0	14.9 max
RR5025/6332	Embossed Taping	12mm	178 ± 2.0	80.0 ± 0.2	13.0 ± 0.5	20 min	2.5 ± 0.5	13.0 ± 1.0	16.5 ± 0.2



Type	A	B	W	F	E	P1	P2	P0	D	G
RR1005	0.65 ± 0.1	1.25 ± 0.1	8.00 ± 0.3	3.5 ± 0.05	1.75 ± 0.1	2.0 ± 0.05	2.0 ± 0.05	4.0 ± 0.1	1.5 ± 0.1	2.75
RR1608	1.10 ± 0.2	1.90 ± 0.2	8.00 ± 0.3	3.5 ± 0.05	1.75 ± 0.1	4.0 ± 0.1	2.0 ± 0.05	4.0 ± 0.1	1.5 ± 0.1	2.75
RR2012	1.65 ± 0.2	2.40 ± 0.2	8.00 ± 0.3	3.5 ± 0.05	1.75 ± 0.1	4.0 ± 0.1	2.0 ± 0.05	4.0 ± 0.1	1.5 ± 0.1	2.75
RR3216	2.00 ± 0.15	3.57 ± 0.15	8.00 ± 0.3	3.5 ± 0.05	1.75 ± 0.1	4.0 ± 0.1	2.0 ± 0.05	4.0 ± 0.1	1.5 ± 0.1	2.75
RR3225	3.00 ± 0.15	3.57 ± 0.15	8.00 ± 0.3	3.5 ± 0.05	1.75 ± 0.1	4.0 ± 0.1	2.0 ± 0.05	4.0 ± 0.1	1.5 ± 0.1	2.75
RR5025	2.80 ± 0.2	5.60 ± 0.2	12.0 ± 0.3	3.5 ± 0.05	1.75 ± 0.1	4.0 ± 0.1	2.0 ± 0.05	4.0 ± 0.1	1.5 ± 0.1	2.75
RR6332	3.50 ± 0.2	6.70 ± 0.2	12.0 ± 0.3	3.5 ± 0.05	1.75 ± 0.1	4.0 ± 0.1	2.0 ± 0.05	4.0 ± 0.1	1.5 ± 0.1	2.75



RR SERIES THICK FILM CHIP RESISTORS

STANDARD RESISTANCE SERIES

● E24 ±5% ±1%

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 ±1%

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 Quantity (Taping)

Type	Inch	Q'ty/Reel(Pcs)
RR1005	0402	10000
RR1608	0603	5000
RR2012	0805	5000
RR3216	1206	5000
RR3225	1210	5000
RR5025	2010	4000
RR6332	2512	4000

How to order:

RR	1206	L	101	J	T
Chip resistor	Dimension	Characteristics	Resistance	Resistance	Packing
RR Series	1005 (0402)		code	tolerance	method
	1608 (0603)	K: ±100ppm/°C	101=100 Ω	F: ±1%	T: Taping
	2012 (0805)	L: ±200ppm/°C	1R0=1 Ω	G: ±2%	B: Bulk Packing
	3216 (1206)		100=10 Ω	J: ±5%	
	3225 (1210)		102=1K Ω	K: ±10%	
	5025 (2010)		103=1M Ω		
	6332 (2515)		104=10M Ω		