

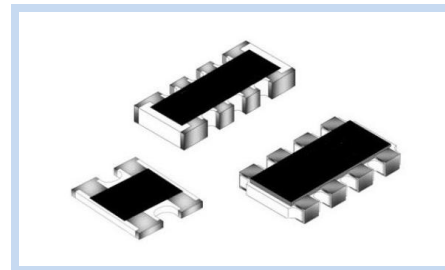
Thick Film Chip Resistor Array Convex Terminal Type

RTA-D series

MERITEK

FEATURE

- Multiple Resistors in Package for Space-Saving Design
- Reliability, High Quality and Fast Delivery
- Improvement of Assembly Efficiency
- Low Parasitic Inductance and Capacitance
- Applications: Entertainment, Communication Equipment, Power Equipment, Measuring Instrument



ELECTRICAL CHARACTERISTICS

Type	Number of Circuits	Power Rating at 70°C	Max Operating Voltage	Max Overload Voltage	Resistance Range (Ω)	TCR (PPM/°C)
					±1%(F), ±5%(J)	
RTA02-2D	2x0402	1/16W	25V	50V	1~9.9	±400
		Jumper: 1A			10 ~ 1M	±200
			-	-		
RTA02-4D	4x0402	1/16W	50V	100V	1~9.9	±400
		Jumper: 1A			10 ~ 1M	±200
			-	-		
RTA03-4D	4x0603	1/10W	50V	100V	1~9.9	±400
		Jumper: 1A			10 ~ 1M	±200
			-	-		

Notes:

1. Operating temperature: -55 ~ +155°C
2. Operating Voltage= $\sqrt{P \cdot R}$ or Max. operating voltage listed above, whichever is lower.
3. Overload Voltage = $2.5 \cdot \sqrt{P \cdot R}$ or Max. overload voltage listed above, whichever is lower.
4. Customized specifications might be available upon request

PART NUMBERING SYSTEM

RTA 03 - 4D 3R3J
(1) (2) (3) (4)

No	Item	Code	Description	
(1)	Product Code	RTA	Thick Film Chip Resistor Array, Isolated type	
(2)	Elements Size	03	03: 0603	02: 0402
(3)	Number of Circuits	4D	4D: 4 circuits, Convex Terminal type	2: 2 circuits
(4)	Resistance Value	3R3J	3.3Ω ±5%(J)	2491: 2490Ω, 000: Jumper, F: ±1%

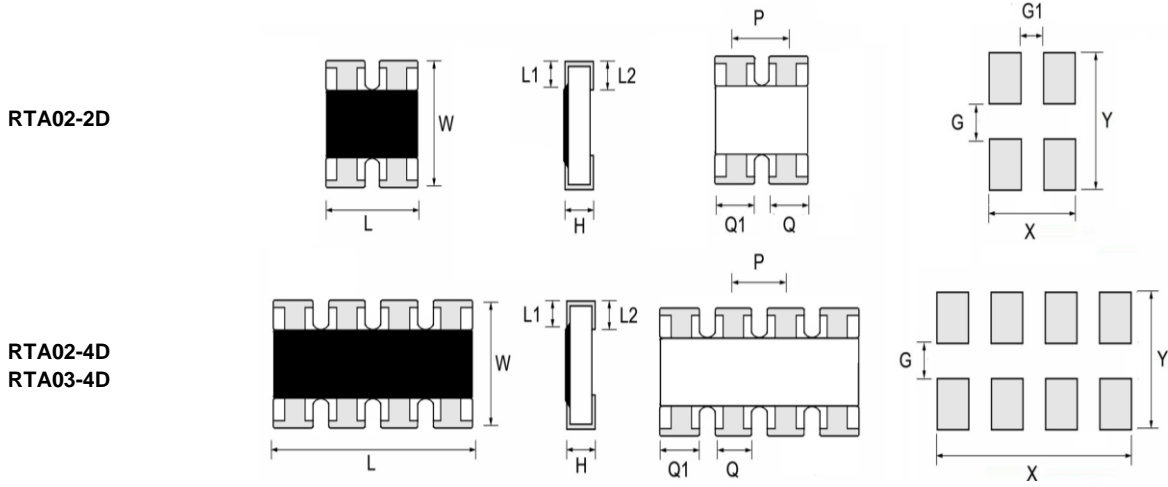
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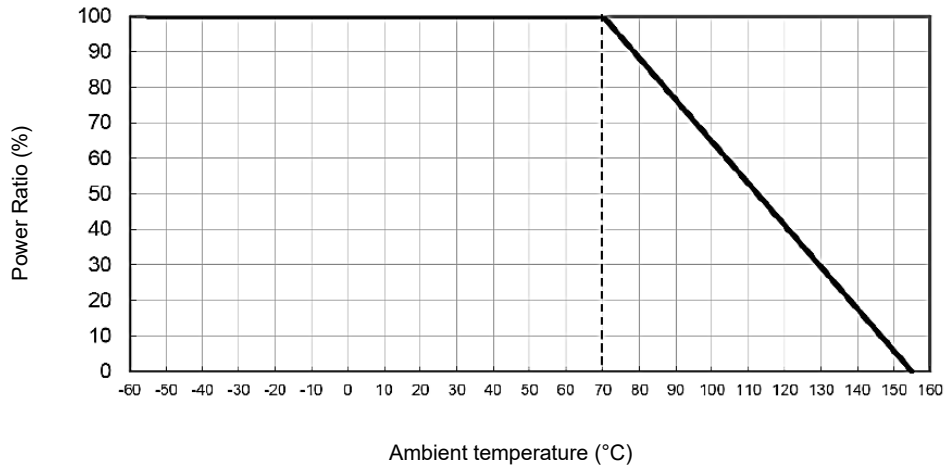
DIMENSIONS

Series	L	W	H	L1	L2	P	Q	Q1	X	Y	G	G1
RTA02-2D	1.00±0.10	1.00±0.10	0.33±0.05	0.15±0.10	0.25±0.10	0.67±0.10	0.34±0.10	--	1.00	2.00	0.50	0.34
RTA02-4D	2.00±0.10	1.00±0.10	0.40±0.10	0.20±0.10	0.20±0.10	0.50±0.10	0.30±0.10	0.43±0.10	0.78	2.00	0.50	0.22
RTA03-4D	3.20±0.20	1.60±0.15	0.50±0.10	0.30±0.20	0.30±0.20	0.80±0.20	0.50±0.15	0.61±0.10	1.20	2.60	1.00	0.40



Unit: mm

POWER DERATING CURVE



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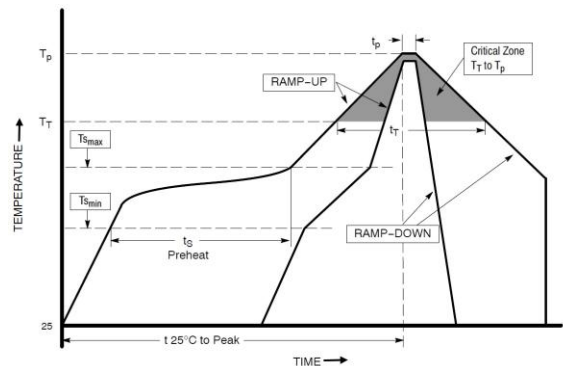
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ENVIRONMENTAL SPECIFICATION

Item	Standard	Test Method	Requirement	
			±1%	±5%
Temperature Coefficient	JIS-C-5201-1 4.8 IEC-60115-1 4.8	-55°C ~ +125°C, 25°C is the reference temperature	As Specified	
Short Time Overload	JIS-C-5201-1 4.13 IEC-60115-1 4.13	2.5*RCWV or Max. Overload Voltage whichever is lower for 5 seconds	±(1.0%+0.05Ω)	±(2.0%+0.10Ω)
Insulation Resistance	JIS-C-5201-1 4.6 IEC-60115-1 4.6	Apply 100V _{DC} for 1 minute	≥10GΩ	
Endurance	JIS-C-5201-1 4.25 IEC-60115-1 4.25.1	70 ±2°C, RCWV or Max. working voltage whichever is less for 1000 hours with 1.5hrs "ON" and 0.5hr "OFF"	±(1.0%+0.05Ω)	±(3%+0.10Ω)
Damp Heat with Load	JIS-C-5201-1 4.24 IEC-60115-1 4.24	40 ±2°C, 90~95% R.H., RCWV Max. working voltage whichever is less for 1000 hours with 1.5hrs "ON" and 0.5hr "OFF"	±(1.0%+0.05Ω)	±(2.0%+0.05Ω)
Resistance to Solvent	JIS-C-5201-1 4.29	The tested resistor is immersed into isopropyl alcohol of 20~25°C for 60 secs. Then the resistor is left in the room for 48 hrs.	±(0.5%+0.05Ω)	±(0.5%+0.05Ω)
Rapid Change of Temperature	JIS-C-5201-1 4.19 IEC-60115-1 4.19	-55°C to +155°C, 5 cycles	±(0.5%+0.05Ω)	±(1.0%+0.10Ω)
Resistance to Soldering Heat	JIS-C-5201-1 4.18 IEC-60115-1 4.18	260 ±5°C for 10 seconds	±(0.5%+0.05Ω)	±(1.0%+0.05Ω)
Bending Strength	JIS-C-5201-1 4.33 IEC-60115-1 4.33	Bending once for 5 seconds with 5mm : 022D, 024D, 034D 3mm : 064D	1% and below : ±(1.0%+0.05Ω) 2% · 5% : ±(1.0%+0.05Ω)	
Leaching	JIS-C-5201-1 4.18 IEC-60068-2-58 8.2.1	260 ±5°C for 30 seconds	Individual leaching area ≤5% Total leaching area ≤10%	

RECOMMENDED SOLDERING PROFILES

Reflow Condition		
Pre Heat	Temp. Min T _{s(min)}	150°C
	Temp. Max T _{s(max)}	200°C
	Time (min. to max.) (t _s)	60~120 secs
Average ramp up rate (T _L) to peak		3°C/sec max.
T _{s(max)} to T _L (Ramp-up rate)		3°C/sec max.
Reflow	Temp. (T _L)	217°C
	Time (min. to max.) (t _L)	60~150 secs
Peak Temperature (T _P)		260°C
Time within 5°C of actual peak Temperature (t _p)		30 secs max.
Ramp-down Rate		6°C/sec max.

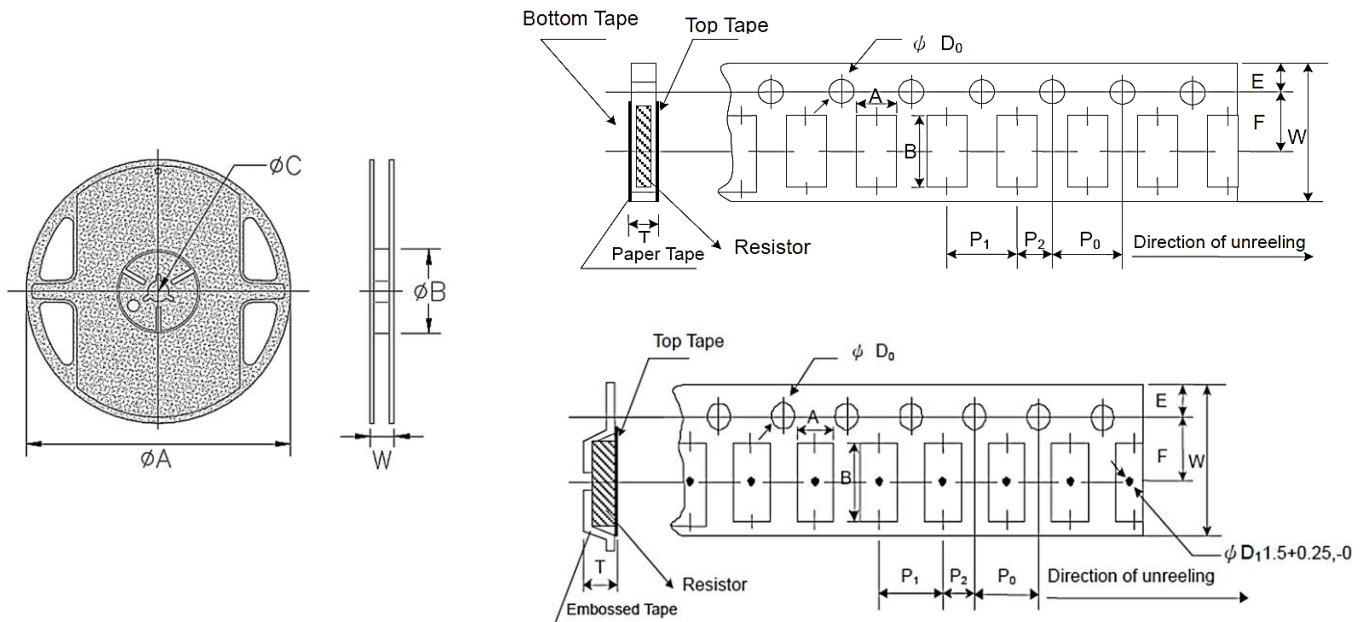


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PACKAGING SPECIFICATIONS



Type	Reel Dimension (mm)						
	Reel Size	Type	Quantity	A	B	C	W
RTA02-2D	7"	Paper	10K	178.5±2.0	60±1.0	13.5±0.1	11.5±2.0
RTA02-4D	7"	Paper	10K	178.5±2.0	60±1.0	13.5±0.1	11.5±2.0
RTA03-4D	7"	Paper	5K	178.5±2.0	60±1.0	13.5±0.1	11.5±2.0

Type	Paper Tape Dimension (mm)									
	A	B	W	E	F	P ₀	P ₁	P ₂	ΦD ₀	T
RTA02-2D	1.25±0.10	1.25±0.10	8.0±0.20	1.75±0.10	3.5±0.05	4.0±0.10	2.0±0.10	2.0±0.05	1.55±0.05	0.45±0.10
RTA02-4D	1.20±0.10	2.20±0.10	8.0±0.20	1.75±0.10	3.5±0.05	4.0±0.10	2.0±0.10	2.0±0.05	1.55±0.05	0.60±0.10
RTA03-4D	1.95±0.10	3.50±0.10	8.0±0.20	1.75±0.10	3.5±0.05	4.0±0.10	4.0±0.10	2.0±0.05	1.55±0.05	0.75±0.10

*Specifications subject to change without notice.