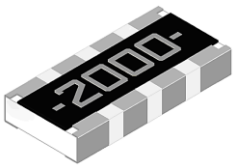
Precision Thin Film Chip Resistor
Array Type

RXA series

MERITEK

FEATURE

- Very tight tolerance down to ±0.1%
- Extremely low TCR down to ±10ppm/°C
- High Efficient in Pick and Place Application
- Application

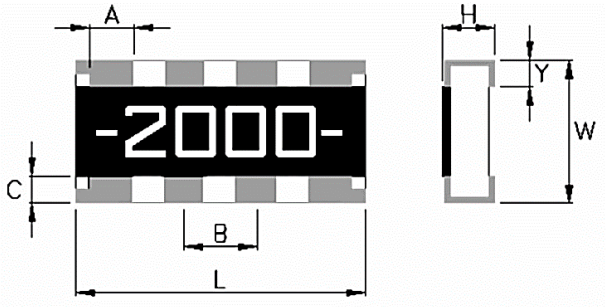


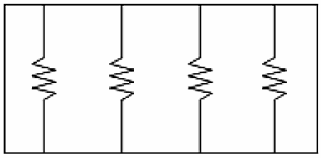
RoHS

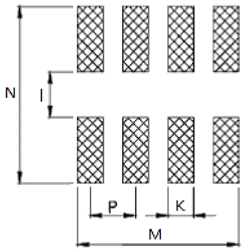
ELECTRICAL CHARACTERISTICS

Size (Code)	Power Rating at 70°C	Max Operating Voltage	Max Overload Voltage	Rated Resistance	Tolerance	TCR (PPM/°C)
0603 (03)	1/16W	50V	100V	24.9~332KΩ	±0.05% ±0.1% ±0.25% ±0.5% ±1.0%	±10, ±15, ±25, ±50
0603 (03)	1/10W	70V	150V	24.9~332KΩ		±25, ±50
0603 (03)	1/8W	70V	150V	24.9~332KΩ		±25, ±50
0603 (03)	1/16W	50V	100V	24.9~60KΩ		±5
0603 (03)	1/10W	70V	150V	24.9~60KΩ		±5

DIMENSIONS







Size (Code)	L	W	H	A	B	C	Y	M	N	K	I	P
0603 (03)	3.20±0.15	1.60±0.15	0.55±0.10	0.50±0.15	0.80±0.05	0.30±0.15	0.30±0.15	3.10	2.85	0.45	0.80	0.80

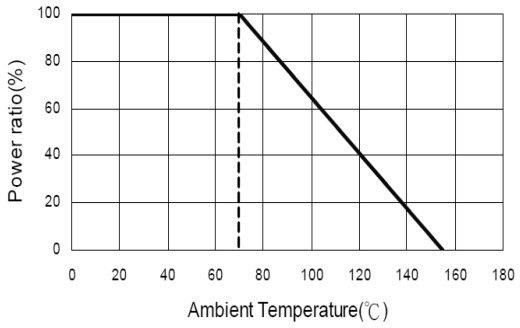
PART NUMBERING SYSTEM

RXA	03	4D	24R9	B	C	Y
(1)	(2)	(3)	(4)	(5)	(6)	(7)

No	Item	Code	Description	
(1)	**Product Code**	RXA	Thim Film Array Chip Resistor Series	
(2)	**Size Code**	03	03: 0603x4	03: 0603
(3)	**Number of Circuits**	4D	4D: 4 circuits	
(4)	**Resistance**	24R9	24R9: 24.9Ω	1R0: 1.0Ω, 2491: 2490Ω
(5)	**Tolerance**	B	B: ±0.1%	C: ±0.25%, D: ±0.5%, F: ±1%
(6)	**TCR (PPM/°C)**	C	C: ±10	D: ±15, F: ±25, G: ±50
(7)	**Power Rating**	Y	Y: 1/16W	X: 1/10W, W: 1/8W

POWER DERATING CURVE

Power Derating Curve



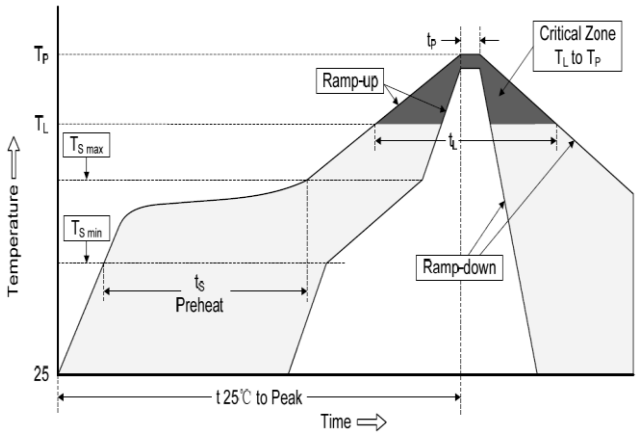
RELIABILITY TEST CONDITION AND REQUIREMENT

Test	Standard	Condition	Requirement
Temperature Coefficient of Resistance (T.C.R.)	MIL-STD-202 Method 304	+25/-55/+25/+125/+25°C	As Specified
Short Time Overload	JIS-C-5201-1 5.5	Overload Voltage for 5 seconds	ΔR±0.1%
Insulation Resistance	MIL-STD-202 Method 302	Apply 100VDC for 1 minute	>1000MΩ
Endurance	MIL-STD-202 Method 108A	70±2°C, RCWV with 1.5 hrs "ON" and 0.5 hrs "OFF".	1000Hr: ΔR±0.15% 8000Hr: ΔR±0.3%
Damp Heat with Load	MIL-STD-202 Method 103B	40±2°C, 90~95% R.H. RCWV for 1000 hrs with 1.5 hrs "ON" and 0.5 hrs "OFF".	ΔR±0.25%
Damp Heat with Load (85°C/ 85% R.H.)	MIL-STD-202 Method 103B	85±2°C, 80~90% R.H. RCWV for 1000 hrs with 1.5 hrs "ON" and 0.5 hrs "OFF".	ΔR±0.5%
Dry Heat	-	+125°C	1000Hr: ΔR±0.25% 8000Hr: ΔR±0.5%
Bending Strength	JIS-C-5201-1 6.1.4	Bending amplitude 3 mm for 10 seconds	ΔR±0.2%
Solderability	MIL-STD-202 Method 208H	245±5°C for 3 seconds	95% min. coverage
Resistance to Soldering Heat	MIL-STD-202 Method 210E	260±5°C for 10 seconds	ΔR±0.2%
Dielectric Withstand Voltage	MIL-STD-202 Method 301	Apply Max Overload Voltage for 1 minute	100V
Thermal Shock	MIL-STD-202 Method 107G	-55°C ~ +150°C, 100 cycles	ΔR±0.25%
Low Temperature Operation	JIS-C-5201-1 7.1	1 hour, -65°C followed by 45 minutes of RCWV	ΔR±0.25%

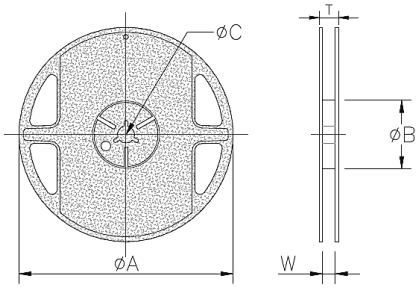
Note:
1. Operating temperature: -55 ~ +155°C
2. Operating Voltage =$\sqrt{(P*R)}$ or Maximum operating voltage listed above, whichever is lower.
3. Overload Voltage =2.5*√(("P*R")) or Maximum overload voltage listed above, whichever is lower.
4. Customized specifications might be available upon request, please contact Meritek for more information.

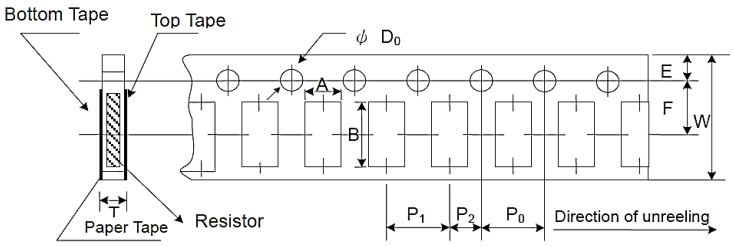
RECOMMENDED SOLDERING PROFILES

Reflow Condition		
Pre Heat	Temp. Min $T_{s(min)}$	150°C
	Temp. Max $T_{s(max)}$	180°C
	Time (min. to max.) (t_s)	90~120 seconds
Average ramp up rate (T_L) to peak		3°C/second max.
$T_{s(max)}$ to T_L (Ramp-up rate)		3°C/second max.
Reflow	Temp. (T_L)	220°C
	Time (min. to max.) (t_L)	60 seconds max.
Peak Temperature (T_P)		260°C ~265°C
Time within 5°C of actual peak Temperature (t_p)		10 seconds max.
Ramp-down Rate		6°C/second



PACKAGING DIMENSION





Type	Reel Dimension (mm)								
	Quantity	Type	Tape Width	Reel Size	A	B	C	W	T
RXA03	5K	Paper	8mm	7”	178.5±1.5	60±1.0	13.0±0.2	9.0±0.5	12.5±0.5

Type	Paper Tape Dimension (mm)									
	A	B	W	E	F	P_0	P_1	P_2	D_0	T
RXA03	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±0.05	2.0±0.05	1.55±0.05	0.85±0.10

*Specifications subject to change without notice.