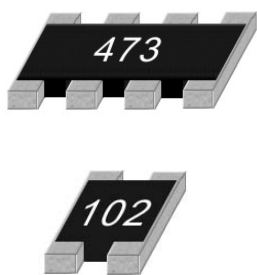


THICK FILM CHIP RESISTORS ARRAY - RA Series



Part Numbering

$\frac{RA}{(1)}$ $\frac{024R}{(2)}$ $\frac{F}{(3)}$ $\frac{I}{(4)}$ $\frac{F}{(5)}$ $\frac{100}{(6)}$

(1) Product Type

Product Type	Type
RA	Thick Film Chip Resistor Array

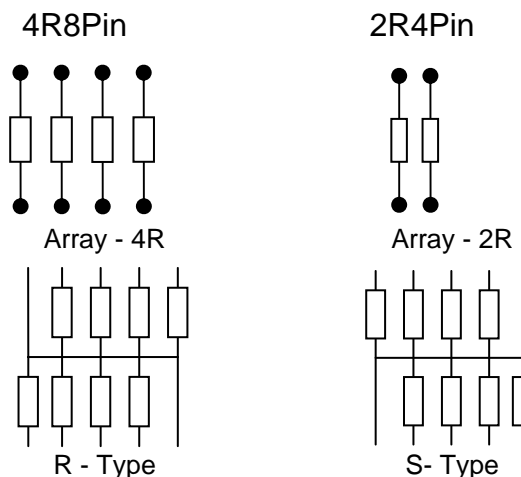
(2) Dimension (LxW)

Codes	Dimensions (LxW)	EIA
RA022R	1.0x1.0mm	032R(0402)
RA032R	1.6x1.6mm	032R(0603)
RA024R	2.0x1.0mm	024R(0402)
RA028R	3.2x1.6mm	028R(0402)
RA034R	3.2x1.6mm	034R(0603)
RA024C	2.0x1.0mm	024C(0402)
RA034C	3.2x1.6mm	034C(0603)

(3) Resistance Tolerance

Codes	Resistance Tolerance
F	±1%
G	±2%
J	±5%

Schematics



(4) Packing

Codes	Type
T	Taping Reel
B	Bulk Packing

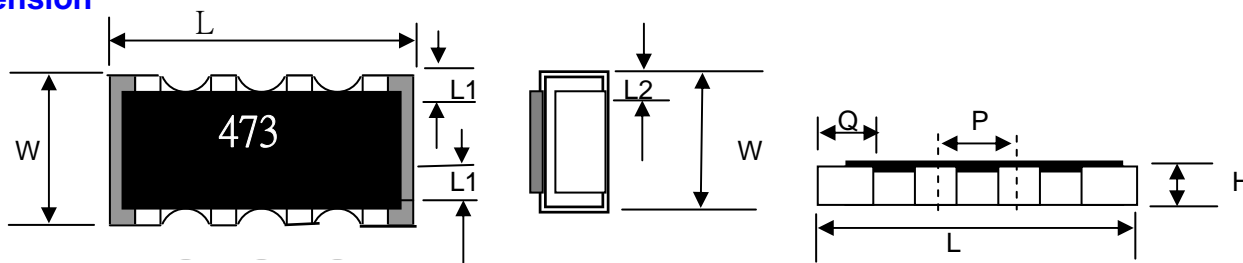
(5) TCR

Codes	Type
F	± 200 ppm
-	No Specified

(6) Resistance

Codes	Type
100	10Ω
90R9	90Ω9
101	100Ω
222	2.2KΩ
333	33KΩ
474	470KΩ
105	1MΩ

Dimension

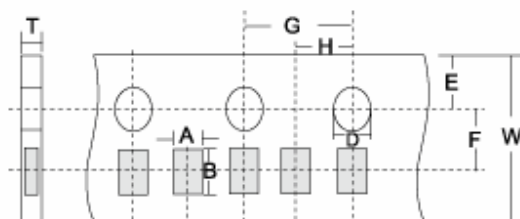


TYPE	L	W	H	L1	L2	P	Q
RA022R	1.0±0.1	1.0±0.1	0.33±0.05	0.15±0.10	0.25±0.10	0.67±0.10	0.34±0.10
RA032R	1.6±0.15	1.6±0.15	0.50±0.04	0.35±0.10	0.30±0.01	0.99±0.01	0.61±0.01
RA024R	2.0±0.1	1.0±0.1	0.40±0.10	0.20±0.10	0.20±0.10	0.50±0.10	0.30±0.10
RA028R	3.2±0.2	1.6±0.2	0.55±0.10	0.30±0.15	0.30±0.15	0.64±0.10	0.64±0.10
RA034R	3.2±0.15	1.6±0.15	0.50±0.10	0.30±0.10	0.30±0.10	0.80±0.10	0.50±0.10
RA024C	2.0±0.1	1.0±0.1	0.40±0.10	0.15±0.10	0.20±0.10	0.50±0.10	
RA034C	3.2±0.2	1.6±0.2	0.50±0.04	0.35±0.10	0.40±0.01	0.80±0.01	

THICK FILM CHIP RESISTORS ARRAY - RA Series

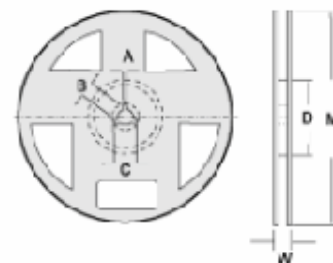
Standard Electrical Specifications

TYPE	Power Rating at 70°C	Rate Current of Jumper (A)	Max. working voltage (Vw)	Max. Over Load Voltage (Vo)	TCR (ppm/°C)	Resistance Tolerance(%)	Resistance Range (ohm)	Operating Temperature (°C)
RA022R (0402 - 022R)	0.063W	1A	50V	100V	±200	Jumper ±1%	Below 50m 10~1M ohm	-55°C to +125°C
SCRA032R (0603 - 032R)	0.1W					±5%		
RA024R (0402 - 024R)	0.063W	1A	50V	100V	±200	Jumper ±1%	Below 50m 10~1M ohm	-55°C to +125°C
RA034R (0603 - 034R)	0.1W					±5%		
RA028R (0402 - 028R)	0.063W	1A	50V	100V	±200	±5%	10~1M ohm	-55°C +125°C
RA064R (1206 - 064R)	0.25W	2A	200V	400V	±200	±1% ±5%	10~1M ohm 10~1M ohm	-55°C +125°C
RA024C (0402 - 024CR)	0.063W	1A	50V	100V	±200	Jumper ±1%	Below 50m 10~1M ohm	-55°C to +125°C
RA034C (0603 - 034C)	0.1W					±5%		



TAPPING SPECIFICATION

Type	Size	A	B	W	E	F	G	H	T	D
Paper	SCRA-022R	1.25±0.1	1.25±0.1	8.0±0.2	1.75±0.1	3.5±0.05	4.0±0.1	2.0±0.5	0.45±0.1	1.5±0.1
	SCRA-024C	1.20±0.1	2.2±0.1	8.0±0.2	1.75±0.1	3.5±0.05	4.0±0.1	2.0±0.5	0.6±0.1	1.5±0.1
Type	SCRA-024R	1.20±0.1	2.2±0.1	8.0±0.2	1.75±0.1	3.5±0.05	4.0±0.1	2.0±0.5	0.6±0.1	1.5±0.1
	SCRA-01 (0201)	0.45±0.1	0.75±0.1	8.0±0.2	1.75±0.1	3.5±0.05	4.0±0.1	2.0±0.5	0.35±0.1	1.5±0.1
	SCRA-02 (0402)	0.70±0.1	1.20±0.1	8.0±0.2	1.75±0.1	3.5±0.05	4.0±0.1	2.0±0.5	0.45±0.1	1.5±0.1

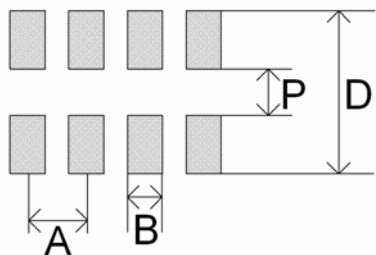


PACKING REEL DIMENSION (mm)

TYPE	Reel	Reel/Pcs	A	B	C	D	W	M
SCRA032R	7"	5K/Reel	2.0±0.5	13.5±2.0	21±0.5	60±2.0	12.5±2.0	178±2.0
SCRA034R								
SCRA034CR								
SCRA028R	7"	10K/Reel	2.0±0.5	13.5±2.0	21±0.5	60±2.0	12.5±2.0	178±2.0
SCRA022R								
SCRA024R								
SCRA024C								

THICK FILM CHIP RESISTORS ARRAY – RA Series

Pattern



TYPE	A	B	D	P
RA04	0.65	0.35~0.40	1.40~1.60	0.45~0.55
RA03	0.80	0.40~0.50	2.80~3.40	0.70~0.90
RA02	0.50	0.25~0.30	1.60~2.00	0.40~0.50

Environmental Characteristics

Item	Specification		Test Method
	1%	5%	
Temperature Coefficient of Resistance	As Spec.		MIL-STD-202F Method 304 +25/-55/+25/+125/+25°C
Short Time Overload	$\pm(1.0\%+0.05\Omega)$	$\pm(2.0\%+0.05\Omega)$	RCWV*2.5 or Max Overloading Voltage , 5 seconds
	Jumper <50mΩ		
Insulation Resistance	$\geq 10G\Omega$		MIL-STD-202F ,Method 302 RCOV for 1minute
Voltage Proof	No breakdown or flashover		MIL-STD-202F Method 301 Apply Max Overload Voltage for 1 minute
Resistance to Soldering Heat	$\pm(0.5\%+0.05\Omega)$	$\pm(1.0\%+0.05\Omega)$	MIL-STD-202F Method 210E 260±5°C ,10±1second
	Jumper <50mΩ		
Solderability	>95% Coverage		MIL-STD-202F Method 208H 235±5°C ,2 second
Resistance to Dry Heat	$\pm(1.0\%+0.05\Omega)$	$\pm(1.5\%+0.10\Omega)$	JIS-C-5202-7.2 125°C ,96 hrs without load
	Jumper <50mΩ		
Thermal Shock	$\pm(0.5\%+0.05\Omega)$	$\pm(1.0\%+0.05\Omega)$	MIL-STD-202F Method 107G -55°C~150°C , 5 cycles
	Jumper <50mΩ		
Humidity (steady state)	$\pm(2.0\%+0.10\Omega)$	$\pm(3.0\%+0.10\Omega)$	MIL-202F ,Method 103B 40±2°C , 90~95% R.H. for 1000 hours
	Jumper <50mΩ		
Load Life	$\pm(2.0\%+0.1\Omega)$	$\pm(3.0\%+0.1\Omega)$	MIL-STD-202F Method 108 RCWV , 70°C , 1.5 hours on , 0.5 hours off 1000~1048 hours
	Jumper <50mΩ		