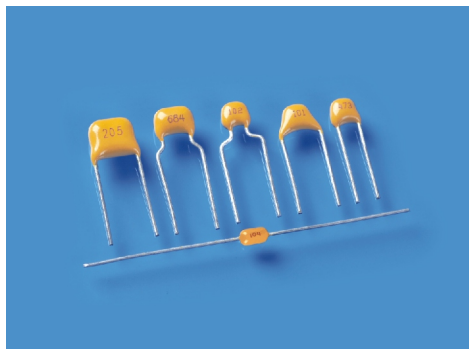


Surge Arresters
Diodes & Rectifiers
Tantalum Capacitors
Trimming Potentiometers
Multilayer Ceramic Capacitors

MKT - Radial Multilayer Ceramic Capacitors



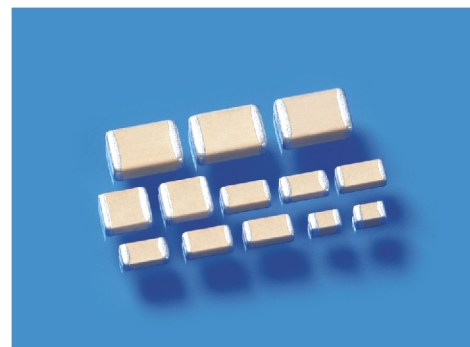
Size Code	Shape	Dimensions (mm)					Voltage	Capacitance (pF)		
		F (±0.5)	H (±1)	L max	W max	T max		COG (NPO)	X7R	Y5V (Z5U)
0805	a	2.54	5.0				25V 50V 100V	0R5 ~ 332 0R5 ~ 222 0R5 ~ 102	331 ~ 104 331 ~ 104 331 ~ 104	103 ~ 105 103 ~ 105 103 ~ 684
	b	2.54	10.0							
	C1	5.08	5.0 / 10.0	4.2	3.8	3.8				
	C2	5.08	5.0							
C3	5.08	5.0 / 10.0								
1206	a	2.54					25V 50V 100V	0R5 ~ 682 0R5 ~ 472 0R5 ~ 392	102 ~ 224 102 ~ 104 102 ~ 105	103 ~ 125 103 ~ 105
	b	3.50	10.0	5.0	4.5	3.8				
	C1	5.08								
1210	b	3.50	10.0				25V 50V 100V	0R5 ~ 103 0R5 ~ 472 0R5 ~ 392	102 ~ 334 102 ~ 224 102 ~ 105	104 ~ 155
	C1	5.08		7.6	5.5	3.8				

AKT - Axial MLCC Ceramic Capacitors

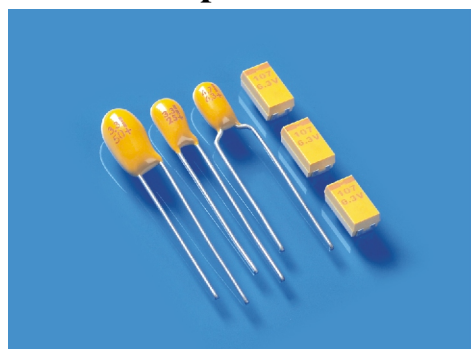
Size Code	Dimensions(mm)					Voltage	Capacitance Ranges												
	L max	D max	F (±0.6)	D (±0.5)	COG (NPO)		X7R	Y5V(Z5U)											
15	3.8	2.5	5.08	10.0	0.45	25V 50V 100V	OR5 ~ 102 OR5 ~ 821 OR5 ~ 561	101 ~ 333 101 ~ 223 101 ~ 472	222 ~ 224 222 ~ 154										
										17	4.3	2.5	5.08	10.0	0.45	25V 50V 100V	OR5 ~ 332 OR5 ~ 222 OR5 ~ 102	331 ~ 104 331 ~ 473 331 ~ 223	103 ~ 105 103 ~ 684

LKT - Low Voltage Multilayer Chip Ceramic Capacitor - SMD HKT - High Voltage Multilayer Ceramic Capacitor -SMD

	LKT	HKT
Voltage	16, 25, 50, 63 VDC	100, 200, 500, 1000, 2000, 3000, 4000 VDC
Capacitance	0.5pF ~ 10uF	1pF ~ 2.2uF
Terminations	Tin / Nickel	Tin / Nickel
Tolerance	±0.1pF ~ +80/ -20%	±0.25pF ~ +80/ -20%
Packing	Tape & Reel (0402, 0603, 0805, 1206, 1210, 1812, 2220)	Tape & Reel (0603, 0805, 1206, 1210, 1808, 1812, 2220, 2225)
Dielectric & Values	NPO X7R Y5V Z5U consult product pages of catalog for cap ranges and voltage rating	NPO X7R consult product pages of catalog for cap ranges and voltage rating



CKT - Chip Tantalum Capacitor - SMD



SPECIFICATIONS	
Operating Temperature	-55°C to +125°C ; (>85°C applying derated voltage)
Rated Voltage	4, 6.3, 10, 16, 20, 25, 35 & 50 VDC
Capacitance Tolerance	±10%, ±20% (20°C, 120HZ / 100HZ)
Leakage Current	$I_0 \leq 0.01 C R_{UR}$ OR 0.5 uA (20°C) (whichever is greater) Measured after 5 minutes application of rated voltage CR - (uF) Nominal Capacitance ; UR - (V) Rated Voltage
Load Life	85°C, After applying rated voltage for 2000 hours at 85°C ; Capacitance change : within +/-10% of the initial value ; Dissipation factor : Not more than 150% of the specified value ; Leakage current : Not more than the specified value

TKT - Tantalum Capacitor -Dipped

Specifications	
Operating Temperature	: -55°C to +125°C ; >85°C with rated voltage derating
Rated Voltage	: 3, 4, 6.3, 10, 16, 20, 25, 35 & 50 VDC
DC Leakage At 20°C	: $10 \leq 0.01 C_r V_r$ or 0.5 uA (Whichever is greater)
Dissipation Factor at 20°C	: Please See Table A
Capacitance Range	: 0.047uF ~ 680 uF
Capacitance Tolerance	: ±20% ; ±10% ; ±5% (for special order)
Temperature Characteristics	: See Table A

Table A

Capacitance (uF)	Cap.Change(%)			DF Max.(%)				DCL Max.(uF)		
	-55°C	-85°C	+125°C	-55°C	+20°C	+85°C	+125°C	+20°C	+85°C	+125°C
<1.0				6	4	6	6	$I_0 \leq 0.02 C_{rUR}$ or 1uF whichever is greater	+1010	+12.510
1.5 ~ 6.8				8	6	8	8			
10 ~ 68	±10	±15	±25	10	8	10	10			
100 ~ 680				12	10	12	12			

Trimming Potentiometer



Electrical Characteristics	
Standard Resistance Range	50 Ω - 5M Ω
Resistance Tolerance	±10%
Absolute Minimum Resistance	≤10 Ω (100 Ω ≤ R ≤ 1K Ω) ≤1% R (R > 1K Ω)
Contact Resistance Variation	CRV ≤ 4% or 5 Ω (whichever is larger)
Insulation Resistance	R1 ≥ 1G Ω (100VAC)
Withstand Voltage	220VDC
Effective Travel	22 ± 5 turns nom



Electrical Characteristics	
Standard Resistance Range	50 Ω - 5M Ω
Resistance Tolerance	±10%
Absolute Minimum Resistance	≤10 Ω (100 Ω ≤ R ≤ 1K Ω) ≤1% R (R > 1K Ω)
Contact Resistance Variation	CRV ≤ 3% R or 5 Ω (whichever is larger)
Insulation Resistance	R1 ≥ 1G Ω (100VAC)
Withstand Voltage	220VDC
Effective Travel	300° ± 10°



Electrical Characteristics	
Standard Resistance Range	1K Ω - 100K Ω
Resistance Tolerance	±5%
Independent Linearity	±0.5%
Effective Electrical Travel	3600° ± 10°
Noise	100 Ω ENR max
Insulation Resistance	R ≥ 1G Ω
Withstand Voltage	710VDC (101.3kPa) 470VDC (8.5kPa)



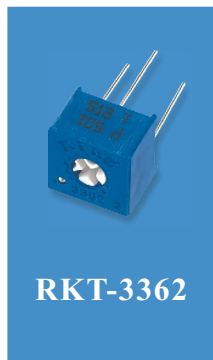
Electrical Characteristics	
Standard Resistance Range	100 Ω - 100K Ω
Total Resistance Tolerance	±5%
Independent Linearity	±0.25%
Effective Electrical Angle	3600° ± 10°
Noise/ Output Smoothness	100 Ω ENR max
Insulation Resistance (500 VDC)	R ≥ 1G Ω
Withstanding Voltage	710VDC (101.3KPa)



Electrical Characteristics	
Standard Resistance Range	50 Ω - 5M Ω
Resistance Tolerance	±10%
Absolute Minimum Resistance	≤10 Ω (100 Ω ≤ R ≤ 1K Ω) ≤1% R (R > 1K Ω)
Contact Resistance Variation	CRV ≤ 3% or 5 Ω (whichever is larger)
Insulation Resistance	R1 ≥ 1G Ω (100VAC)
Withstand Voltage	220VDC
Effective Travel	12 ± 2 turns nom



Electrical Characteristics	
Standard Resistance Range	50 Ω - 5M Ω
Resistance Tolerance	±10%
Absolute Minimum Resistance	≤10 Ω (100 Ω ≤ R ≤ 1K Ω) ≤1% R (R > 1K Ω)
Contact Resistance Variation	CRV ≤ 3% or 5 Ω (whichever is larger)
Insulation Resistance	R1 ≥ 1G Ω (100VAC)
Withstand Voltage	220VDC
Effective Travel	28 ± 2 turns nom



Electrical Characteristics	
Standard Resistance Range	50 Ω - 5M Ω
Resistance Tolerance	±10%
Absolute Minimum Resistance	≤10 Ω (100 Ω ≤ R ≤ 1K Ω) ≤1% R (R > 1K Ω)
Contact Resistance Variation	CRV ≤ 3% or 5 Ω (whichever is larger)
Insulation Resistance	R1 ≥ 1G Ω (500VAC)
Withstand Voltage	220VDC
Effective Travel	260° ± 10°



Electrical Characteristics	
Standard Resistance Range	50 Ω - 2M Ω
Resistance Tolerance	±10%
Absolute Minimum Resistance	≤10 Ω (100 Ω ≤ R ≤ 1K Ω) ≤1% R (R > 1K Ω)
Contact Resistance Variation	CRV ≤ 3% or 5 Ω (whichever is larger)
Insulation Resistance	R1 ≥ 1G Ω (500VAC)
Withstand Voltage	220VDC
Effective Travel	270° ± 10°



Electrical Characteristics	
Standard Resistance Range	100 Ω - 2M Ω
Resistance Tolerance	±30% std
Absolute Minimum Resistance	1% max (≤ 2K = 30 Ω)
Contact Resistance Variation	3% max
Resistance	Essentially infinite
Adjustment Angle	235° ± 10°



Electrical Characteristics	
Standard Resistance Range	50 Ω - 2M Ω
Resistance Tolerance	±10%
Absolute Minimum Resistance	≤10 Ω (100 Ω ≤ R ≤ 1K Ω) ≤1% R (R > 1K Ω)
Contact Resistance Variation	CRV ≤ 3% or 5 Ω (whichever is larger)
Insulation Resistance	R1 ≥ 1G Ω (100VAC)
Withstand Voltage	100VDC
Effective Travel	280° ± 10°

