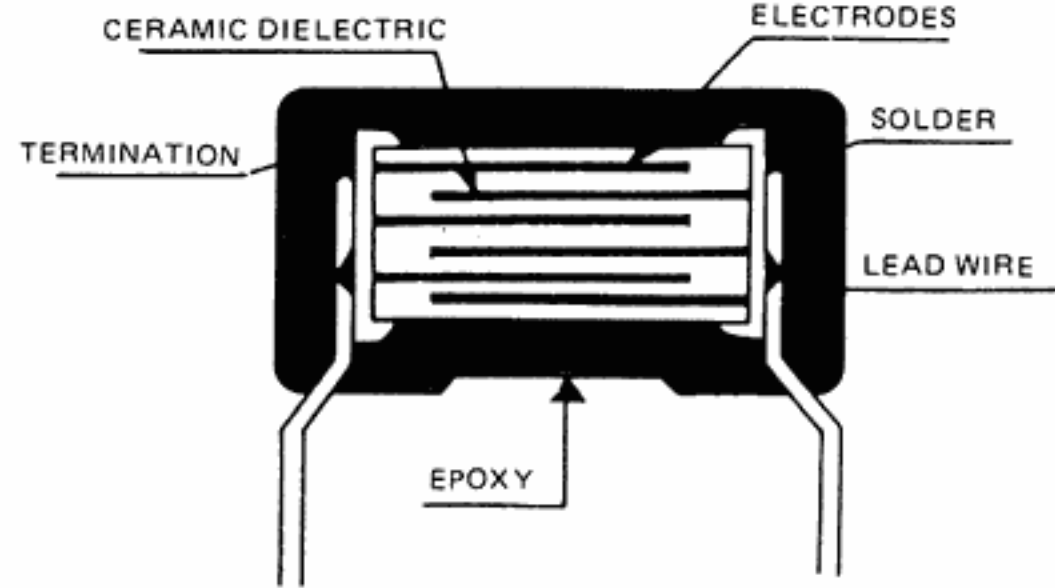


MULTILAYER CERAMIC CAPACITORS

EPOXY COATED RADIAL TYPE

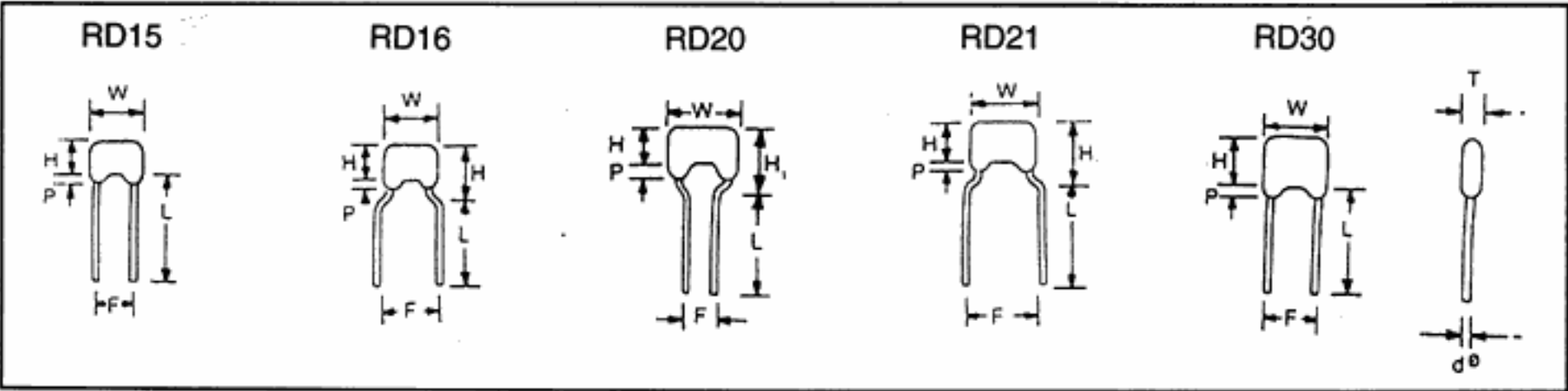
CONSTRUCTION



APPLICATION

- NPO: Temperature compensation type, have little or no change in capacitance with variation in temperature. Hence, they are used in radio-frequency oscillators, precision timing circuits, ultrastable amplifiers, etc.
- X7R: Temperature stable type for by-pass and decoupling in radio and television receivers, computers servo systems, audio tone, and coupling, etc., where moderate capacitance variations are permissible and dissipation factor is not critical.
- Z5U/Y5V: General type for by-pass and filtering applications.

1. LEAD SHAPE:



2. LEAD SPACE (F)

CODE	LEAD SPACE (mm/inch)	
2	2.54 ± 0.8	0.1 ± 0.032
5	5.08 ± 0.8	0.2 ± 0.032

3. LEAD LENGTH (l)

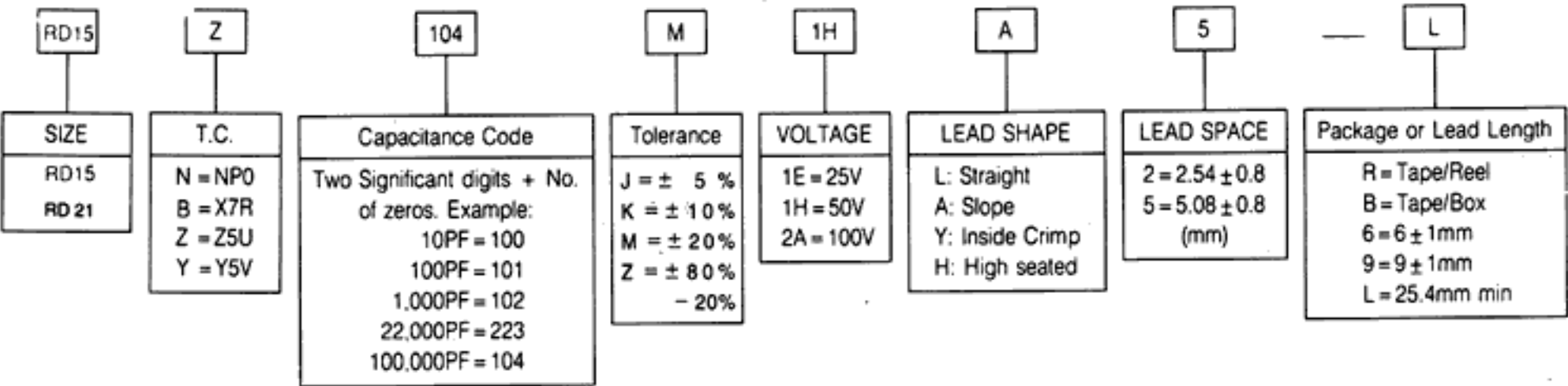
CODE	LEAD LENGTH	REMARK
6	6mm ± 1mm	SPECIFIED LEAD LENGTH UPON REQUEST
9	9mm ± 1mm	
L	25.4 mm min	

4. BODY SIZE & DIMENSION

Size Code	W Max.	H Max.	T Max.	H ₁ Max.	F	L	P Max.	d ⁰
RD 15	4.06 (0.16)	3.81 (0.15)	2.54 (0.10)	—	2.54 (0.10)	6.0 ± 1.0 (0.24 ± 0.04)	1.50 (0.06)	0.53 ± 0.05 (0.02 ± 0.002)
RD16	4.06 (0.16)	3.81 (0.15)	2.54 (0.10)	7.62 (0.30)	5.08 (0.20)			
RD20	5.08 (0.20)	5.08 (0.20)	3.05 (0.12)	7.62 (0.30)	2.54 (0.10)	10.0 ± 2.0 (0.39 ± 0.08)		
RD21	5.08 (0.20)	5.08 (0.20)	3.05 (0.12)	7.62 (0.30)	5.08 (0.20)	25.0 (1.00) mim.		
						28.0 (1.10) mim.		

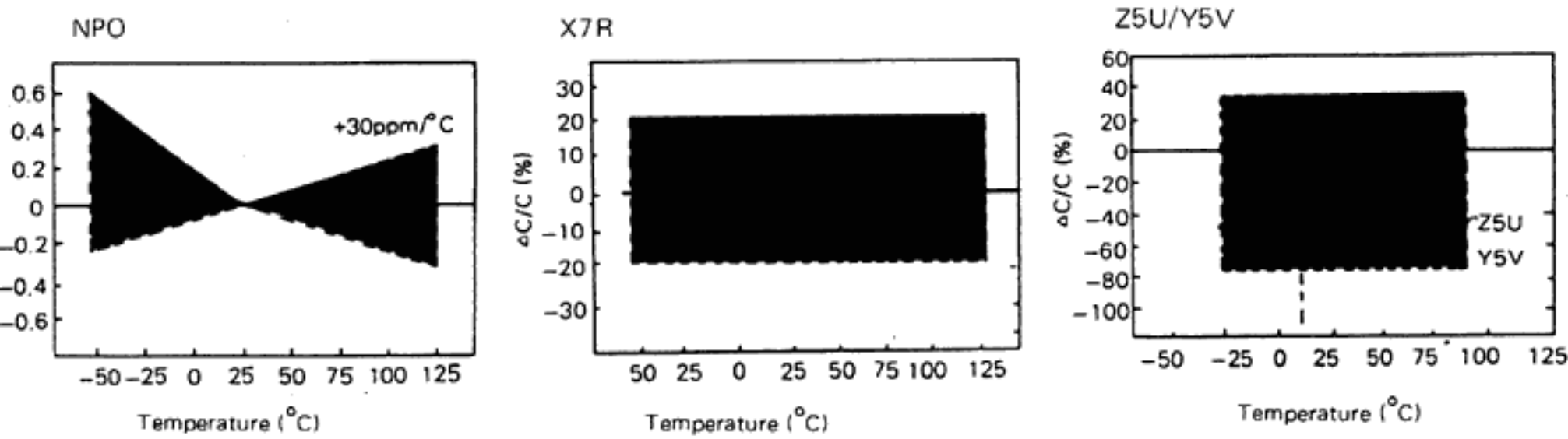
MULTILAYER CERAMIC CAPACITORS
EPOXY COATED RADIAL TYPE

Part Code Designation



TYPICAL PERFORMANCE CHARACTERISTICS

1. TEMPERATURE CHARACTERISTICS



2. SPECIFICATIONS

Temperature coefficient

NPO : 0 ± 30ppm/°C, -55°C to +125°C
X7R : ± 15%, -55°C to +125°C
Z5U : +22%, -56%, +10°C to +85°C
Y5V : +22%, -82%, -30°C to +85°C

Capacitance Test 25°C

NPO : 1 VRMS max at 1 KHz
(1 MHz for 100pF or less)
X7R : 1 VRMS max at 1 KHz
Z5U : 1 VRMS max at 1 KHz
Y5V : 1 VRMS max at 1 KHz

Dissipation Factor 25°C

NPO : 0.15% max at 1 KHz, 1 VRMS max.
(1 MHz for 100pF or less)
X7R : 2.5% max at 1 KHz, 1 VRMS max.
Z5U : 5% max at 1 KHz, 1 VRMS max.
Y5V : 5% max at 1 KHz, 1 VRMS max.

Dielectric Strength 25°C (Flash Test)

NPO and X7R : 300% rated voltage for 5 seconds with 50 mA. max charging current.
Z5U and Y5V : 250% rated voltage for 5 seconds with 50 mA. max. charging current.

Life Test (1000hrs)

NPO : ≤ ± 3% at 200% rated voltage, 125°C
X7R : ≤ ± 12.5% at 200% rated voltage, 125°C
Z5U : ≤ ± 30% at 200% rated voltage, 85°C
Y5V : ≤ ± 30% at 200% rated voltage, 85°C

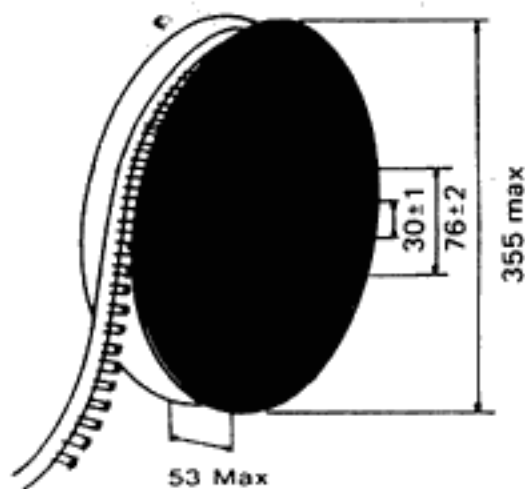
Insulation Resistance 25°C

NPO and X7R : 100GΩ or 1000MΩ-MFD whichever is less.
Z5U and Y5V : 10GΩ or 100MΩ-MFD whichever is less.

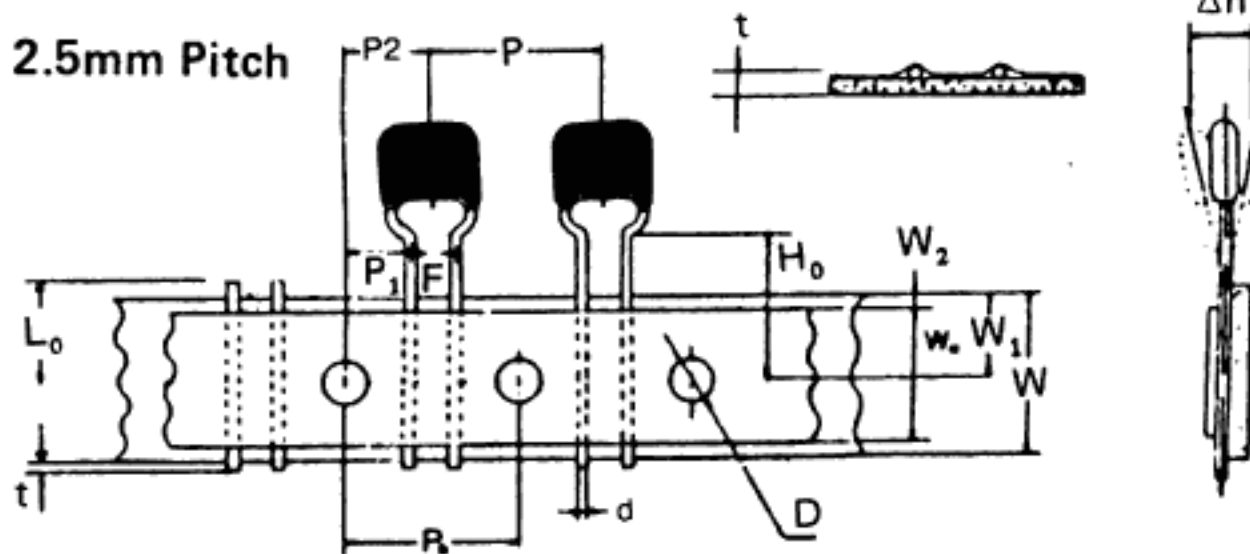
MULTILAYER CERAMIC CAPACITORS EPOXY COATED RADIAL TYPE

RADIAL TAPED TYPE FOR AUTOMATIC INSERTION

■ RADIAL TAPE/REEL



● 2.5mm Pitch



● 2.5mm Pitch

Quantity:

2500PCS/REEL
2000PCS/BOX

(Unit: mm)

Code	P	P ₀	P ₁	P ₂	d	F	Δh	W	W ₀	W ₁	W ₂	H ₀	t	D	t	L ₀
Dim.	12.7	12.7	5.1	6.35	0.5	2.5	0	18	12	9	1.5	16	1.0	4.0	0.7	11
Tol.	±1	±0.3	±0.7	±1.3	±0.05	±1	±2	+1 -0.5	±1	±0.5	±1.5	±0.5	MAX	±0.2	±0.2	MAX

● 5mm Pitch

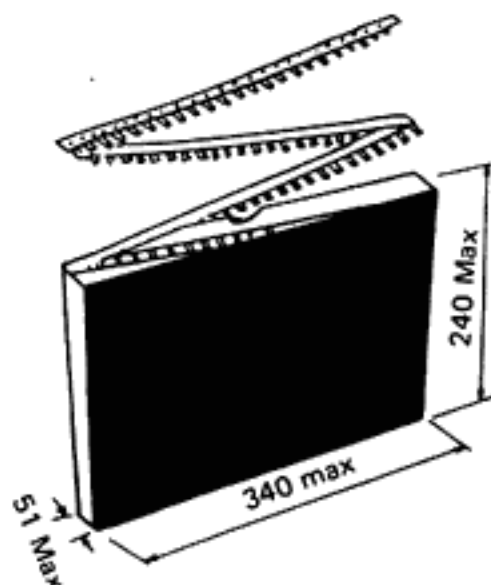
Quantity:

2500PCS/REEL
2000PCS/BOX

(Unit: mm)

Code	P	P ₀	P ₁	P ₂	d	F	Δh	W	W ₀	W ₁	W ₂	H ₀	t	D	t	L ₀
Dim.	12.7	12.7	3.85	6.35	0.5	5.0	0	18	12	9	1.5	16	1.0	4.0	0.7	11
Tol.	±1	±0.3	±0.7	±1.3	±0.05	±1	±2	+1 -0.5	±1	±0.5	±1.5	±0.5	MAX	±0.2	±0.2	MAX

■ RADIAL TAPE/BOX



● 5mm Pitch

