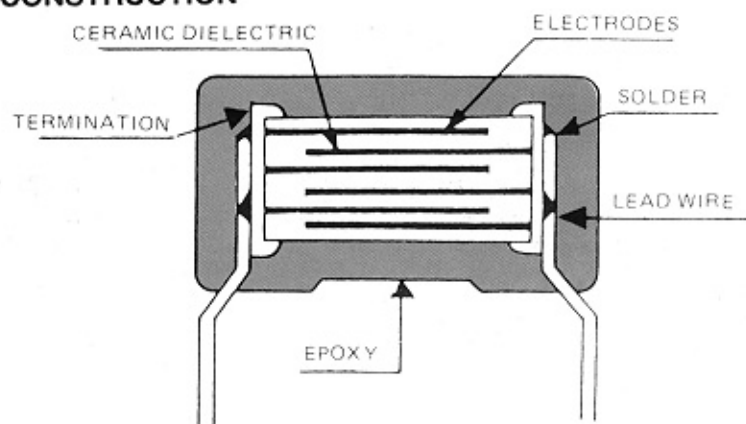


MULTILAYER CERAMIC CAPACITORS EPOXY COATED RADIAL TYPE

LAUBE

CONSTRUCTION



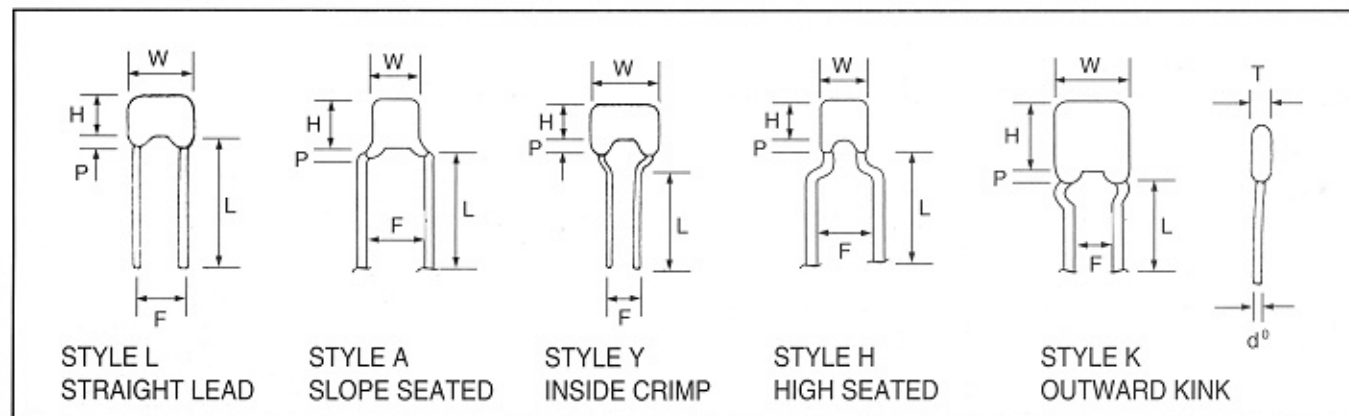
APPLICATION

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

CODE	PACKING	LEAD LENGTH
R	Tape/Reel	—
B	Tape/Box	—
K	Bulk	LEAD LENGTH UPON REQUEST 2.5-25.4mm
L		25.4mm min

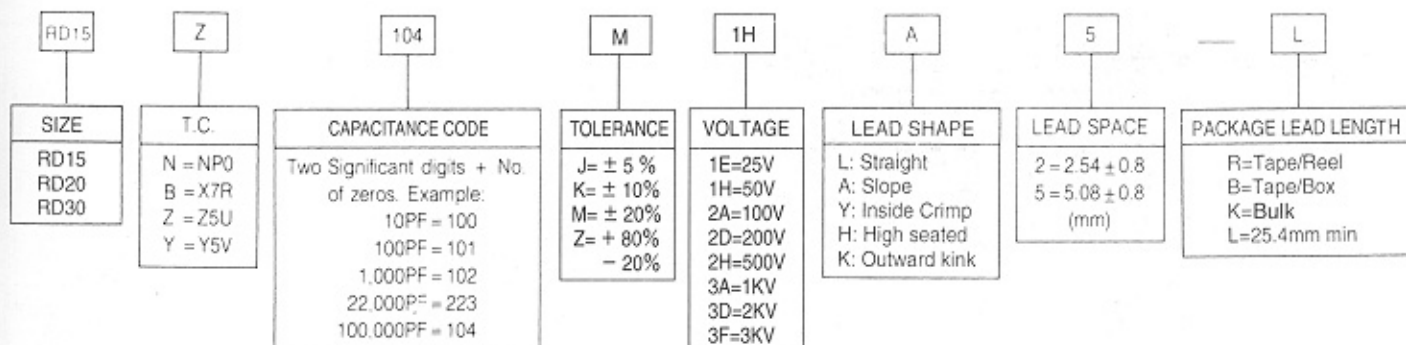
SIZE CODE and DIMENSIONS (millimeter)

SIZE CODE	H	W	T	D	d ⁰	LEAD LENGTH	LEAD SPACING(F)	LEAD SHAPE
RD15	3.81	3.81	2.54	2.00	0.53	2.5mm } 25.4mm	2.54	L
RD20	5.08	5.08	3.18				5.08	A.H.K.
							2.54	L.K.Y.
RD30	7.62	7.62	3.81				5.08	H

MULTILAYER CERAMIC CAPACITORS EPOXY COATED RADIAL TYPE

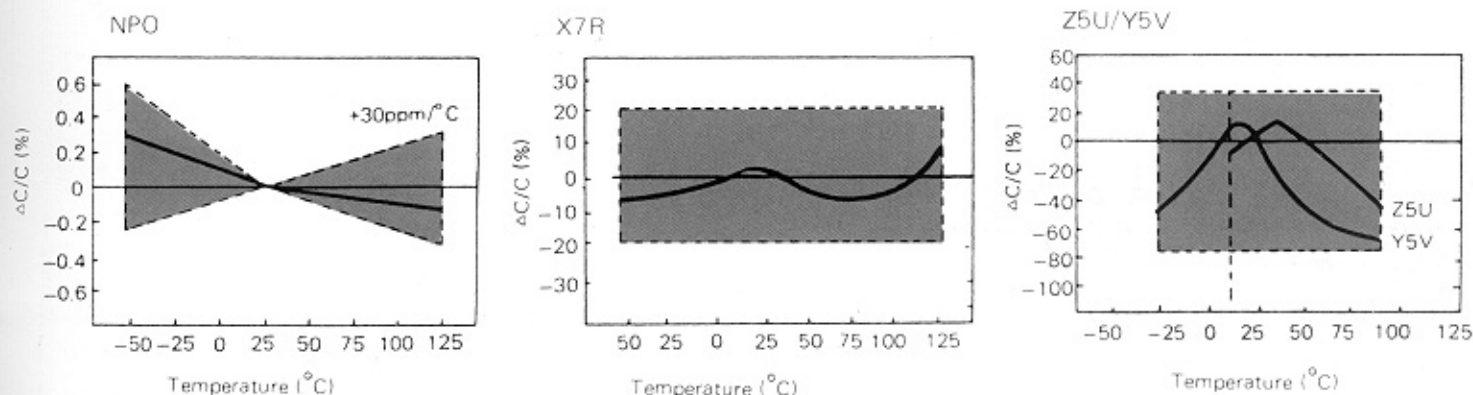
LAUBE

Part Code Designation



TYPICAL PERFORMANCE CHARACTERISTICS

1. TEMPERATURE CHARACTERISTICS



2. SPECIFICATIONS

Temperature coefficient

NP0 : $0 \pm 30\text{ppm}/^{\circ}\text{C}$, -55°C to $+125^{\circ}\text{C}$
 X7R : $\pm 15\%$, -55°C to $+125^{\circ}\text{C}$
 Z5U : $+22\%$, -56% , $+10^{\circ}\text{C}$ to $+85^{\circ}\text{C}$
 Y5V : $+22\%$, -82% , -30°C to $+85^{\circ}\text{C}$

Capacitance Test 25°C

NP0 : 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

NP0 : 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)

NP0 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)

NP0 : $\leq \pm 3\%$ at 200% rated voltage, 125°C
 X7R : $\leq \pm 12.5\%$ at 200% rated voltage, 125°C
 Z5U : $\leq \pm 30\%$ at 200% rated voltage, 85°C
 Y5V : $\leq \pm 30\%$ at 200% rated voltage, 85°C

Insulation Resistance 25°C

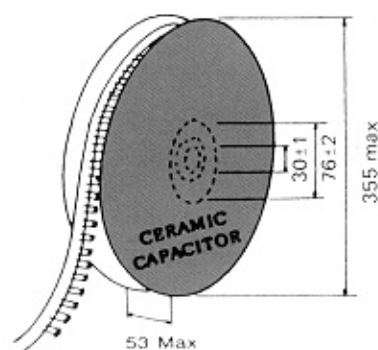
NP0 and X7R : 100G Ω or 1000M Ω -MFD whichever is less.
 Z5U and Y5V : 10G Ω or 100M Ω -MFD whichever is less.

MULTILAYER CERAMIC CAPACITORS EPOXY COATED RADIAL TYPE

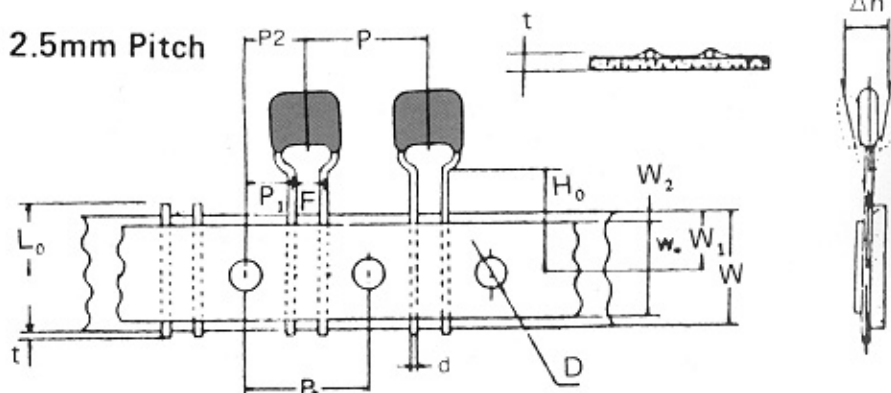
LAUBE

RADIAL TAPED TYPE FOR AUTOMATIC INSERTION

■ RADIAL TAPE/REEL



● 2.5mm Pitch



2500PCS/REEL

Quantity: 2000PCS/BOX

(Unit: mm)

● 2.5mm Pitch

Code	P	P ₀	P ₁	P ₂	d	F	Δh	W	W ₀	W ₁	W ₂	H ₀	ℓ	D	t	L ₀
Dim.	12.7	12.7	5.1	6.35	0.5	2.5	0	18	12	9	15	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

2500PCS/REEL

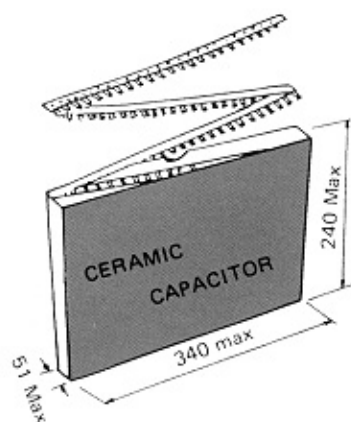
Quantity: 2000PCS/BOX

(Unit: mm)

● 5mm Pitch

Code	P	P ₀	P ₁	P ₂	d	F	Δh	W	W ₀	W ₁	W ₂	H ₀	ℓ	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

