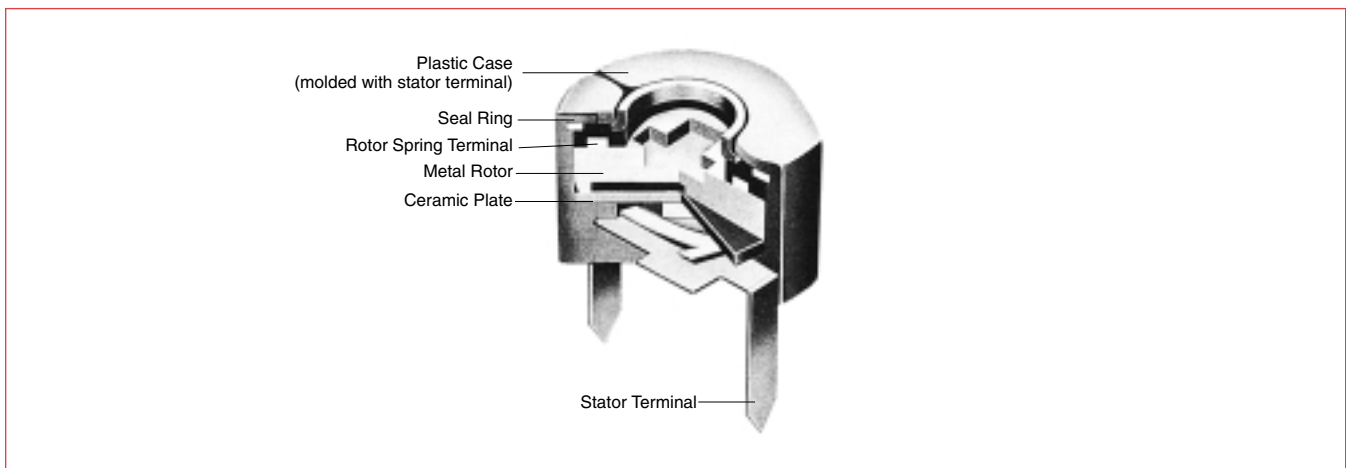


The TZ Series ceramic trimmer capacitors are built into and protected by a color coded plastic case. This unique, axle-less and solder-less construction protects the unit from damages during assembly and provides exceptionally linear temperature coefficient at low cost.

FEATURES

- Excellent shock and vibration resistance
- Exceptionally linear TC
- Dust and flux resistant construction
- Plastic case meets UL94V-0
- Available on tape and reel for automatic insertion



SPECIFICATIONS

Working Voltage: 100VDC or 50VDC

Withstanding Voltage: 220VDC (100V units) or 110VDC (50V units)

Insulation Resistance: $10^4 M\Omega$ min. (50VDC, C max.)

Driving Torque: 1.96 to 14.7mNm (20 to 150)

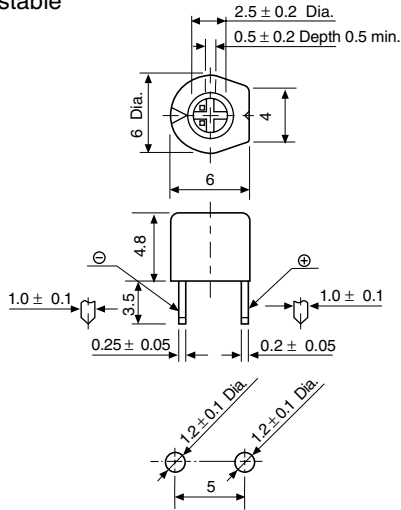
Part Number	Capacitance (pF)		Temp. Coeff. (ppm/°C)	Q (1MHz, °C max.)	Temperature (°C)	Case Color
	Min.	Max.				
SINGLE CERAMIC PLATE TYPE, 100V SERIES						
*TZ03Z2R3□□169	1.25	2.3 ^{-0/+50%}	NP0 ± 200	300 min.	-55 to +85	Black
*TZ03Z050□□169	1.8	5.0 ^{-0/+50%}	NP0 ± 200	500 min.	-55 to +85	Blue
*TZ03Z070□□169	2.0	7.0 ^{-0/+50%}	NP0 ± 200	500 min.	-55 to +85	Blue
*TZ03Z100□□169	2.7	10.0 ^{-0/+50%}	NP0 ± 200	500 min.	-55 to +85	Blue
*TZ03N100□□169	2.1	10.0 ^{-0/+50%}	N200 ± 200	500 min.	-55 to +85	White
*TZ03T110□□169	3.0	11.0 ^{-0/+50%}	N450 ± 300	500 min.	-55 to +85	White
*TZ03T200□□169	4.2	20.0 ^{-0/+50%}	N450 ± 300	500 min.	-55 to +85	Pink
*TZ03R200□□169	4.2	20.0 ^{-0/+50%}	N750 ± 300	500 min.	-55 to +85	Red
*TZ03R300□□169	5.2	30.0 ^{-0/+50%}	N750 ± 300	500 min.	-55 to +85	Green
*TZ03P450□□169	6.8	45.0 ^{-0/+50%}	N1200 ± 500	300 min.	-55 to +85	Yellow
*TZ03P600□□169	9.8	60.0 ^{-0/+50%}	N1200 ± 500	300 min.	-55 to +85	Brown
MONOLITHIC CERAMIC PLATE TYPE, 50V SERIES						
*TZ03Z500□□169	6.0	50.0 ^{-0/+100%}	NP0 ± 300	300 min.	-55 to +85	Orange
*TZ03R900□□169	9.0	90.0 ^{-0/+100%}	N750 ± 300	300 min.	-55 to +85	Black + Marking
*TZ03R121□□169	10.0	120.0 ^{-0/+100%}	N750 ± 300	300 min.	-55 to +85	Black

□□: Terminal Shape Stray capacitance for side adjustment (YR type) adaptor is .2pF.

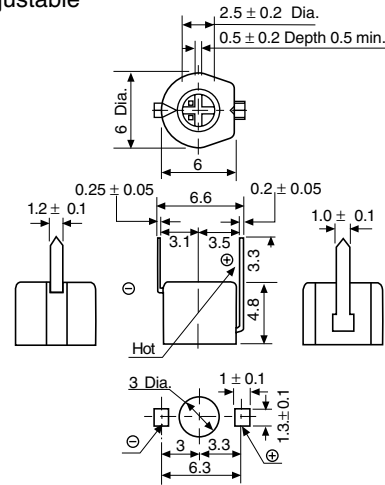
*Available as standard through authorized Murata Electronics Distributors.

DIMENSIONS: mm

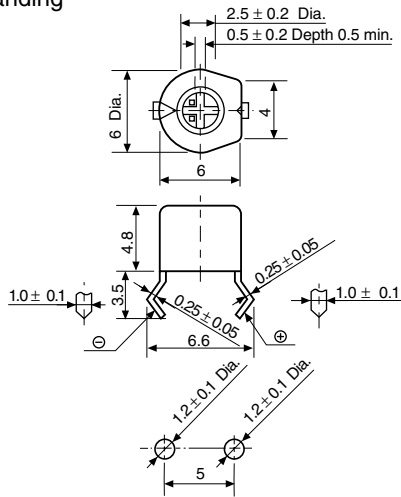
★ER TYPE Top Adjustable



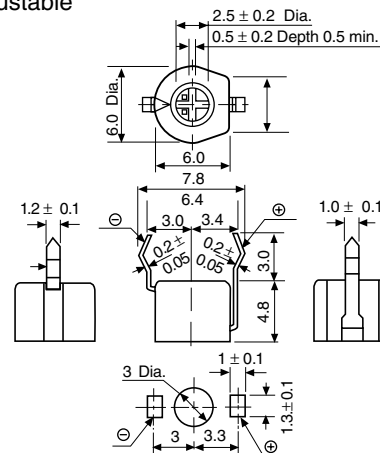
BR TYPE Bottom Adjustable



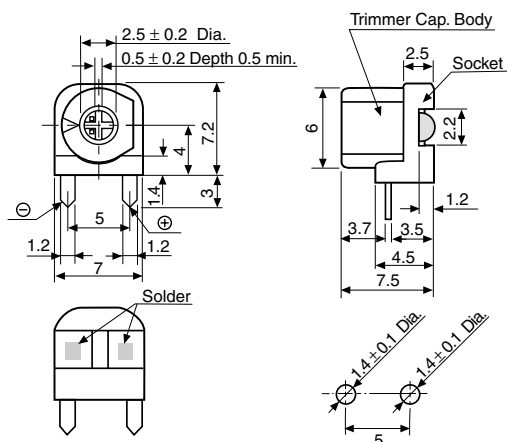
★FR TYPE Self-Standing



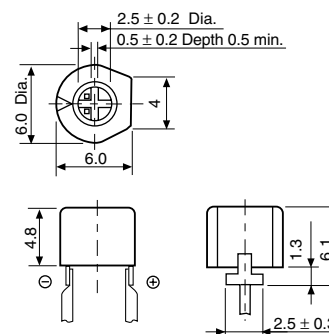
NR TYPE Self-Standing Bottom Adjustable



YR TYPE Side Adjustable



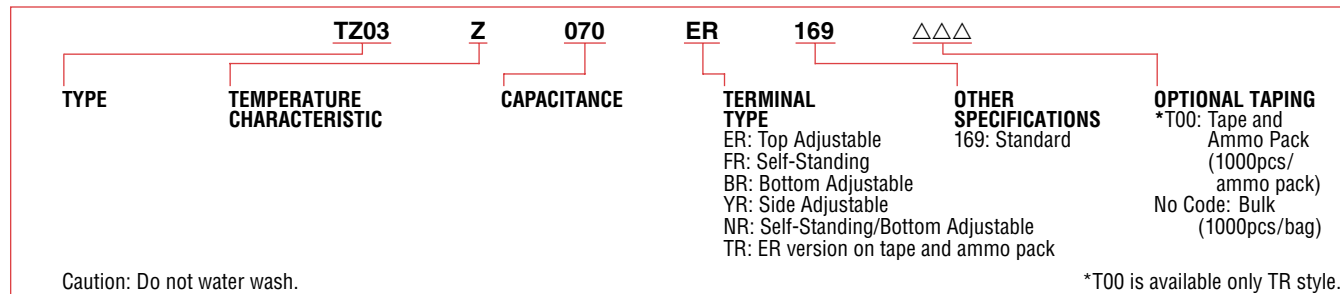
TR TYPE Radial Taping Terminal Style



Notes: Common dimensions shown on ER Style. Tolerances (unless otherwise shown) ±0.5mm
When ordering, ER, FR, BR, YR and NR are all bulk parts. If tape and ammo pack is desired, then an example part number would be TZ03Z070TR169T00.
★ Available as standard through authorized Murata Electronics Distributors. T00 is available only TR style.

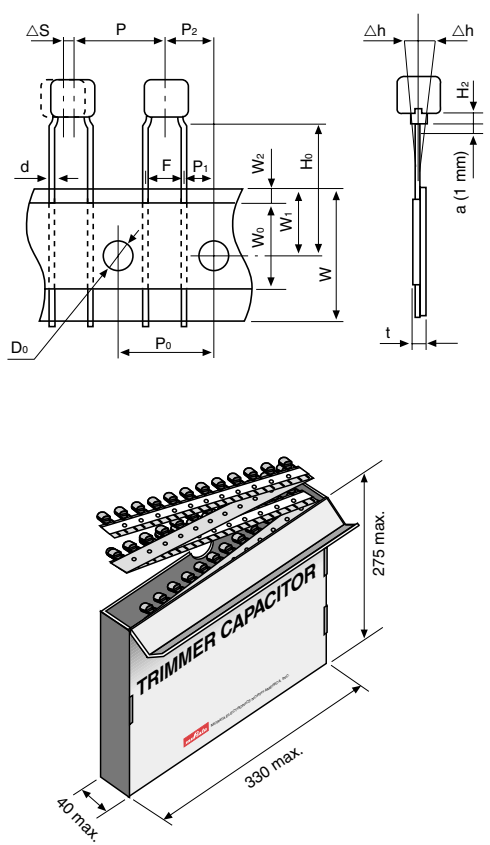
TRIMMER CAPACITORS

PART NUMBERING SYSTEM



DIMENSIONS OF TAPE AND AMMO PACK: mm

Item	Code	Dimensions (mm)	Remark
Pitch of Component	P	12.7	
Pitch of Sprocket Hole	P ₀	12.7 ± 0.3	
Length from Hole Center to Lead	P ₁	3.85 ± 0.7	
	P ₂	6.35 ± 1.3	
Lead Spacing	F	5.0 ^{+0.8} _{-0.2}	
Carrier Tape Width	W	18.0 ± 0.5	
Position of Sprocket Hole	W ₁	9.0 ± 0.5	
Lead Distance between Reference and Bottom Planes	H ₀	18.0 ± 0.5	
Stand-off	H ₂	1.3 ± 0.5	
Diameter of Sprocket Hole	D ₀	4.0 ± 0.1	
Total Thickness, Tape and Lead Wire	t	1.7 max.	
Deviation across Tape	△h	1.5 max.	
Deviation along Tape, Left or Right	△S	0 ± 1.5	
Lead Diameter	d	φ0.6 ± 0.1	Except 'a' part

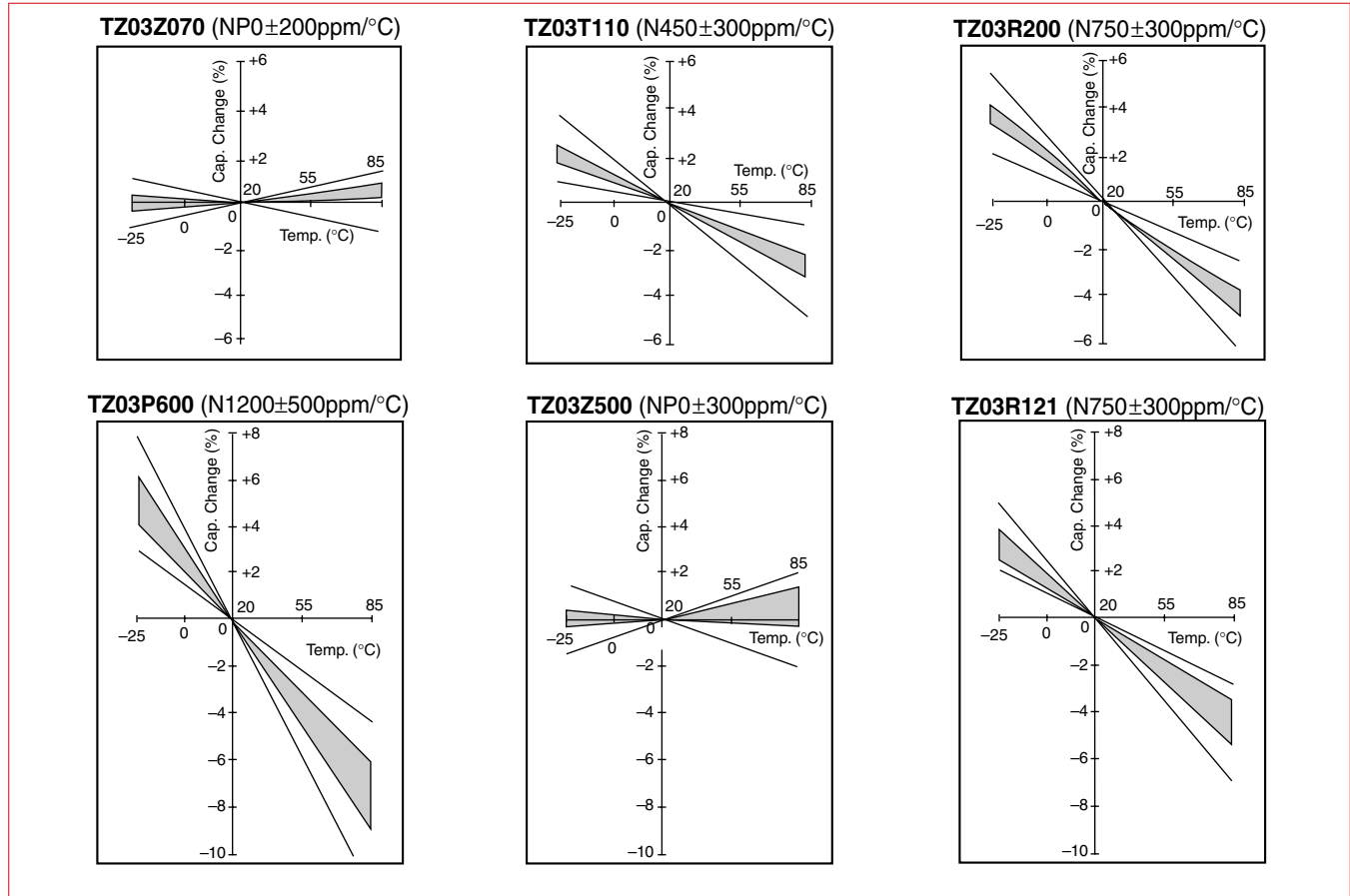


Cautions In Handling:

- Do not use in water wash process.
- Do not use water soluble flux for soldering.
- When hand soldering, avoid contact of the soldering iron to the plastic case.
- Do not use locking adhesives to secure rotor in place.
- Avoid applying excessive force to terminals.

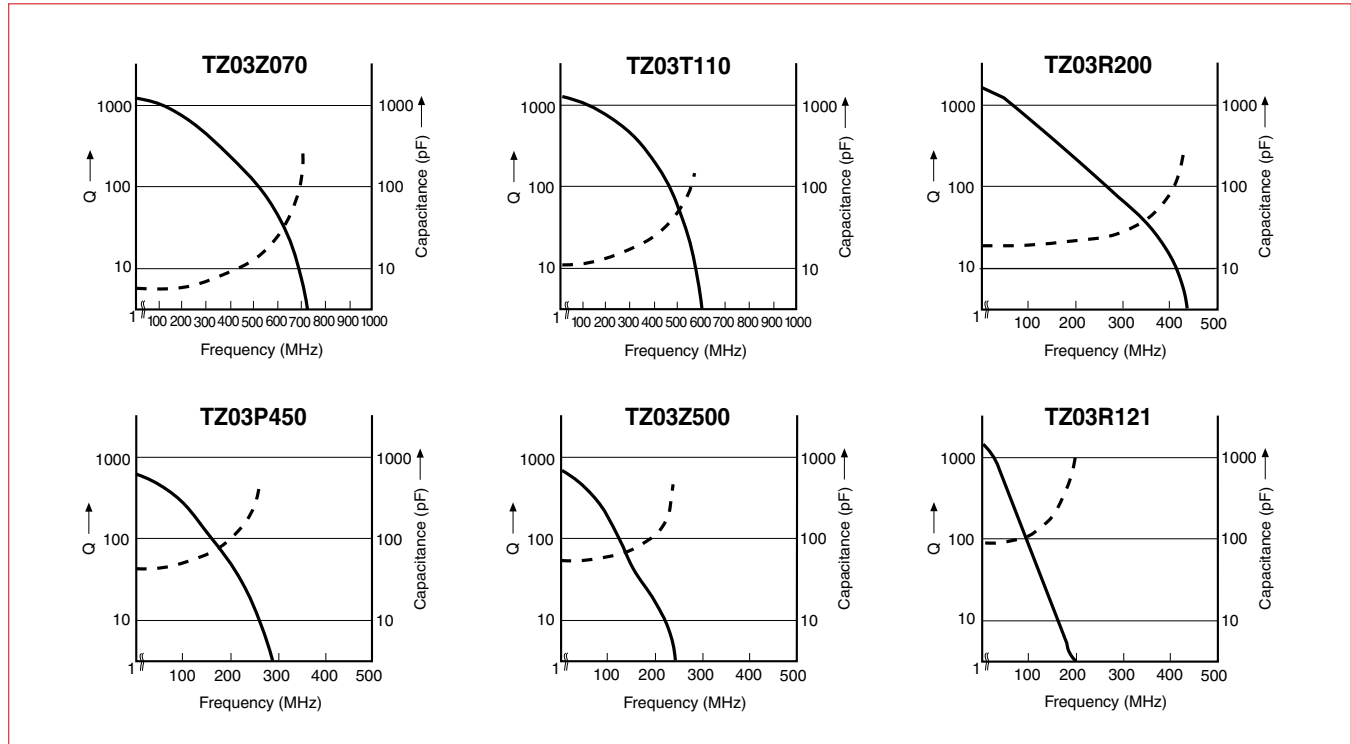
TECHNICAL DATA

Temperature Characteristics



Q AND CAPACITANCE VS. FREQUENCY CHARACTERISTICS

Characteristics on curves are measured at the position of maximum rated capacitance value using RF impedance analyzer.



TRIMMER CAPACITORS