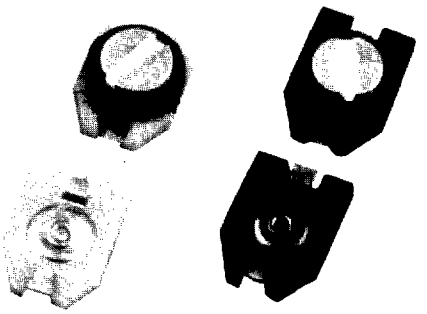
CTZ3 Series

Features:

1) Three styles: Standard, Lead Form and Philips Adjust
2) Small size and thickness.
3) Usable with reflow soldering.
4) High capacitance values.
5) Excellent electrical characteristics.
6) Automatic handling.



How To Order:

CTZ3 E – 03 A – W 07 – P F

Optional: Blank = Straight Lead, F = Lead Form

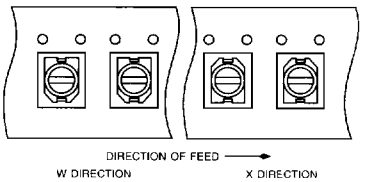
Optional: Blank = Flathead adjust, P = Philips adjust

Quantity Per Reel

1 = 1000 pcs
5 = 5000 pcs

Packaging Method

B = Bulk
W = Taping (W direction)
X = Taping (X direction option)



Temperature Characteristic

A = NPO ± 500 ppm/°C
B = N400 ± 500 ppm/°C
C = N750 ±500 ppm/°C

Maximum Capacitance

03 = 3pF, +100, -0%
05 = 5pF, +100, -0%
10 = 10pF, +100, -0%
20 = 20pF, +100, -0%
30 = 30pF, +100, -0%
40 = 40pF, +100, -0%

Type

S = Reflow non-washable type
E = Reflow washable type

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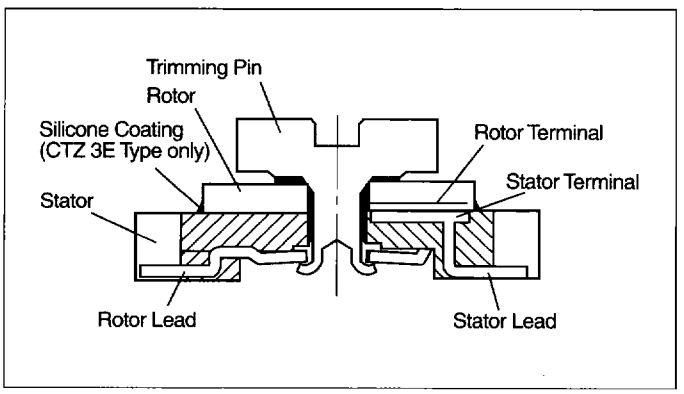
Construction



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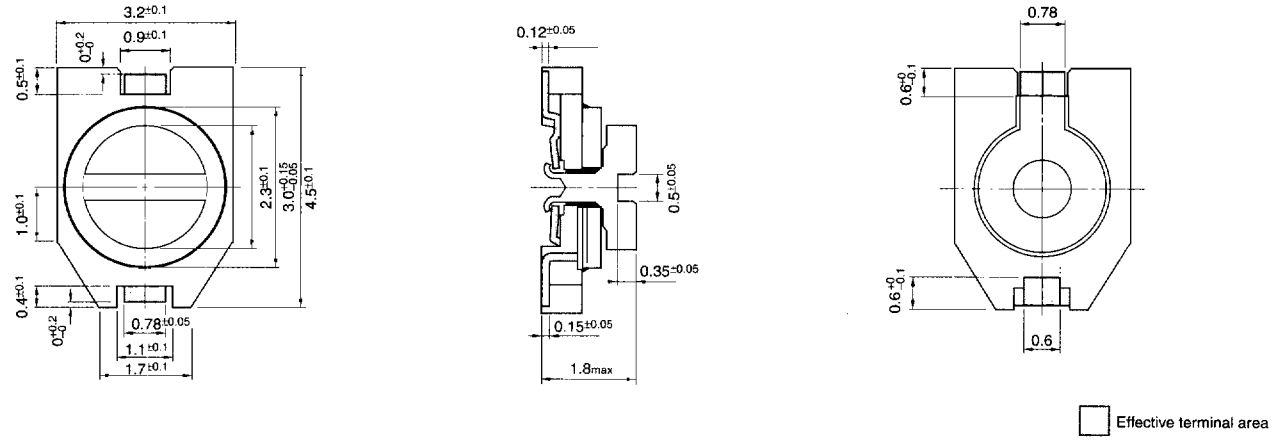
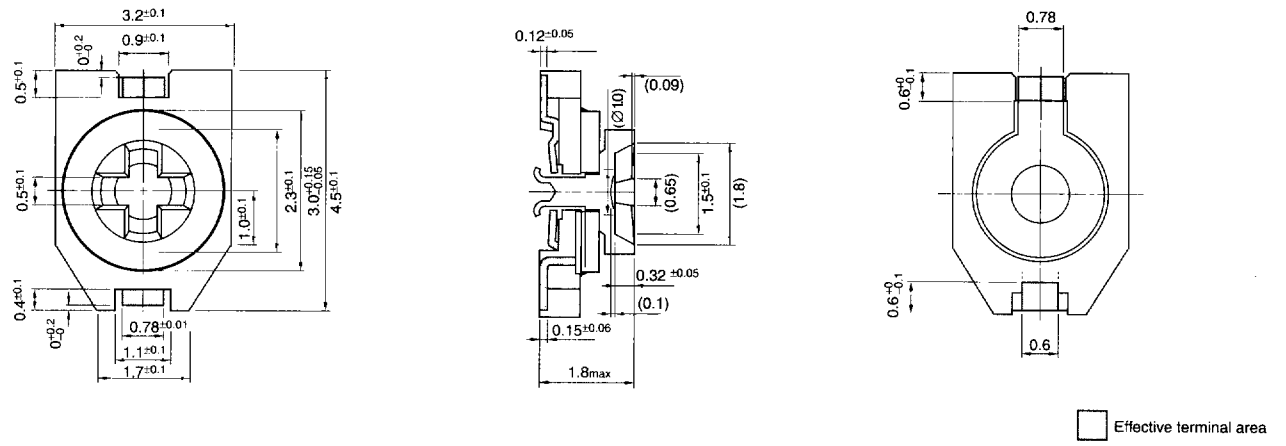
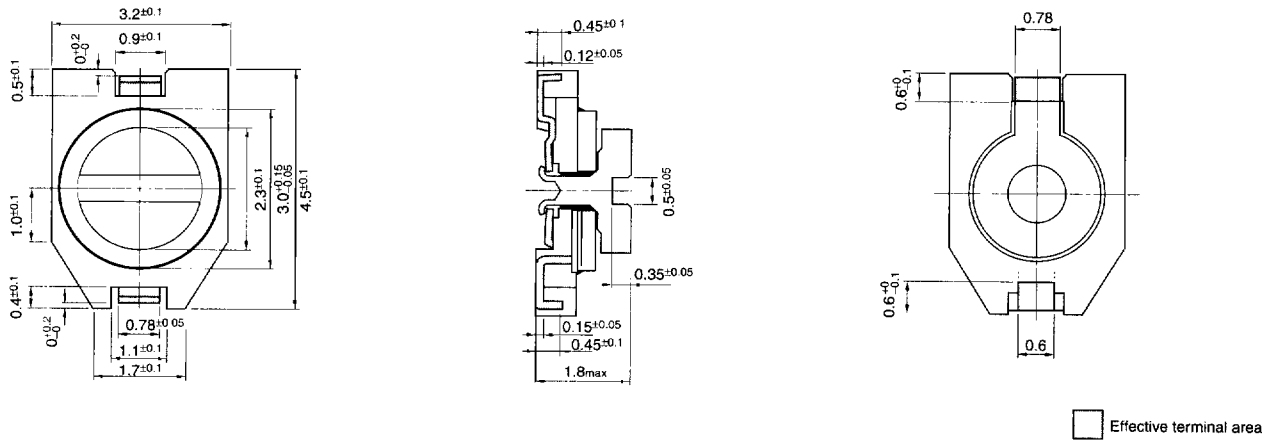
Standard Dimensions



Philips Adjustment Dimensions



Lead Form Dimensions



(Unit: mm)

CTZ3 Series

Specification

Part No.	Capacitance (pF)		Q factor	Rated voltage	Temperature range	Temperature coefficient	Insulation resistance	Torque
	Min. value	Max. value	1±0.1 MHz	VDC	°C	ppm/°C	25 VDC MΩ	g•cm
	+0%	+100% -0%						
CTZ3□-03A	1.0	3	>300	25	-25~+85	NPO±500	$>10^4$	10~150
CTZ3□-05A	1.5	5	>300	25	-25~+85	NPO±500	$>10^4$	10~150
CTZ3□-05C	2.0	5	>300	25	-25~+85	N750±500	$>10^4$	10~150
CTZ3□-10A	2.5	10	>300	25	-25~+85	NPO±500	$>10^4$	10~150
CTZ3□-10B	1.5	10	>300	25	-25~+85	N400±500	$>10^4$	10~150
CTZ3□-10C	3.0	10	>300	25	-25~+85	N750±500	$>10^4$	10~150
CTZ3□-20C	5.0	20	>300	25	-25~+85	N750±500	$>10^4$	10~150
CTZ3□-30C	5.0	30	>300	25	-25~+85	N750±500	$>10^4$	10~150
CTZ3□-40C	5.0	40	>300	25	-25~+85	N750±500	$>10^4$	10~150

Test Methods

Item	Specification	Measuring Condition
Humidity Test	Δ C : ±10% Max Q : 150 Min IR : 103MΩ Min	Expose at 40±2°C, 90~95% RH for 96±4 hours and keep at normal conditions for 1 hour
High Temperature Load Test	Δ C : ±5% Max. Q : 200 Min. IR : 103MΩ Min.	Apply 2 × rated voltage at 85±3°C in high temperature chamber for 96±4 hours and keep at normal conditions for 24 hours
Temperature Cycling Test	Δ C : ±7% Max. Q : 200 Min. IR : 103 MΩ Min	Perform 5 cycles as follows: -25°C (30 min.) → room temperature (5 min.) → +85°C (30 min.) and keep at normal conditions for 24±1 hour
Vibration Test	Δ C : ±5% Max. Q : 250 Min. IR : 103MΩ Min. no problem observed	Vibration frequency range: 10~55Hz Time: 2 hours each in three different vertical directions (X, Y and Z axes, total 6 hours) Amplitude: 1.5 mm
Shock Resistance Test		Fix on 50 gram metal case and drop onto the concrete floor from a height of 1 meter
Solderability	coverage ≥ 75% ea. termination end	Immerse in Pb-Sn solder at 230±5°C for 5 +1/-0 seconds
Resistance to Solder Heat Test	Δ C : ±10% Max. Q : 250 Min. IR : 103MΩ Min.	Put on a hot plate at 270±5°C for 5±1 seconds and keep at normal conditions for 24 hours
Low Temperature Exposure	Δ C : ±5% Max. Q : 250 Min. IR : 103MΩ Min.	Expose in low temperature chamber at -25°C for 96±4 hours and keep at normal conditions for 1 hour
Mechanical Load	Δ C : ±5% Max.	Apply a 100 gram load in the axis of the rotor
Setting Drift	Δ C : ±5% Max.	Rotate rotor 3 times until rotor slot is perpendicular to mounting pads, at 10 rpm. After that, take an initial reading of capacitance after 5 seconds. Measure again after 1 hour