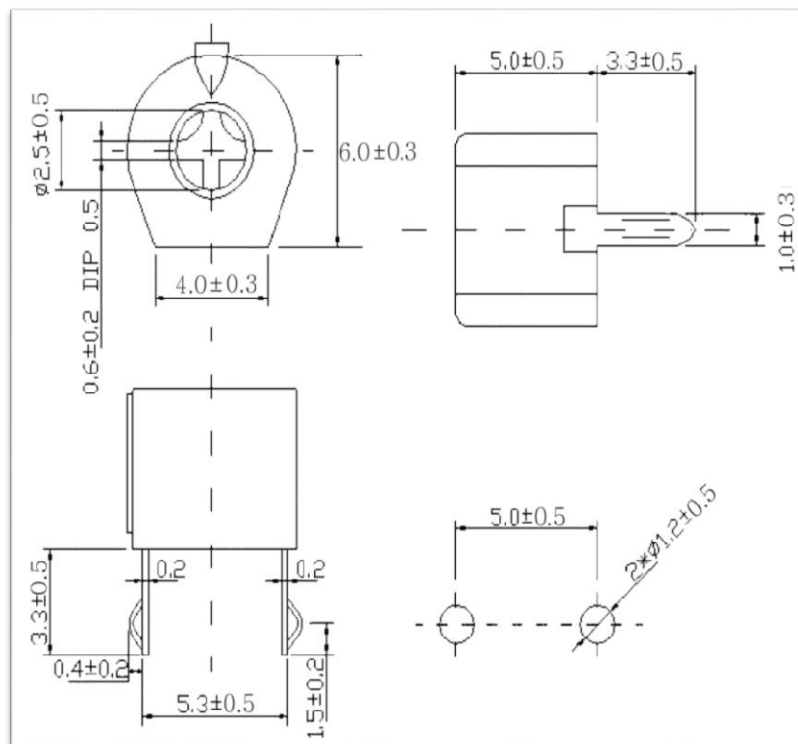


Datasheet

RS PRO 6mm Ceramic Trimmer Capacitors



1 Applications

These specifications are applied to Ceramic Trimmer Capacitors with the ceramic dielectric, which are used for the electric and electronic apparatus and communication equipments .

2. Rated voltage : 100VDC

3 Temperature range : Operating Temp. -25°C to +85°C. Storage Temp. Range: -40°C to +85°C

4. Test circumstance

Test should be done at 20°C with relative humidity at 65%. However, subjected to special requirement, the ideal range should be within +/-5°C and humidity from 45°C to 85°C

5. Storing conditions

Should not location with particularly high temperature and high humidity, and store in conditions not exceeding 35°C and 85% RH.

6 Electrical Characteristic

6.1 Capacitance Drift After Adjustment

Rotation shall be made for 5 cycles for 180° at a rate of 20 r/mm, a capacitance value difference would be found immediately. Once the shaft is stopped at the position of the maximum capacitance value after 24 hours later. The specification range should be within 5pF, 10pF +/- 1.5% and 30pF +/- 2%.

6.2 Capacitance

When measured at 20°C, 0.5V to 5V, and 1MHz, the minimum capacitance is smaller than the minimum nominal capacitance and the maximum capacitance is bigger than the maximum nominal capacitance, Please refer to the minimum and maximum capacitances listed in the attached specification.

6.3 Temperature Characteristics

When measured the capacitance at 1MHz +/- 10%, it reached the heat balance at each temperature changed to +20°C to -25°C to +20°C to -20°C with adjusting to 80%~90% of the maximum capacitance, the capacitance change is based on the capacitance at +20°C of 2nd stage of changing the temperature as above.

Step	1	2	3	4	5
Temperature(°C)	20±2	- 25±2	20±2	85±2	20±2

$$TC = \frac{(C_2 - C_1) * 10^5}{(T_2 - T_1) * C_1}$$

TC : Temperature coefficient at T2 (ppm/°C) C1 : Initial capacitance value at step 3(pF)

C2 : Capacitance at specified temperature T1 : 20°C (step 3)

T2 : Test temperature (step 2 or 4)

6.4 Q (Quality factor)

When measured at 20°C, 0.5V to 5V, 1MHz and maximum capacitance ,the Q values are listed in the attached specification.

6.5 Insulation Resistance

When applied 100VDC between terminals for 1 minute at the maximum capacitance, the insulation resistance shall be more than 10,000M OHM.

6.6 Withstanding Voltage

There is no abnormality after applied 220VDC (less than 5mA) for 5 seconds between the terminals.

7 Structure and mechanical characteristics

7.1 Strength of Terminals

When applied a power to the terminals to any direction slowly and kept at 0.5 kg for 10 seconds, the terminals shall not be loosen or broken mechanically.

7.2 Torque

The torque test should be done at least for 1 round tuning from 50gf/cm to 100gf/cm for the Normal Type. Please note that it might cause the torque will decrease against the rotation increase.

7.3 Solder ability

When dipped the terminals into the soldering pot at 255°C+/-5°C for 2+/-0.5 seconds. There is almost 75% of the total dipped surface are covered with the new solder.

(Caution: Keep the soldering conditions as above. If the soldering conditions are not suitable (excessive time, excessive temperature and etc.), it' s performance will be seriously deviated.)

8 Color Code

Please refer to the color code in the below specifications.

Part No	Capacitance(pF)		Q (1MHz, (max)	Temp.Coeff ppm/ °C	Rated Voltage	withstanding Voltage	Color Code
	Min	Max					
1753524 1753543	2.5 max	7 + 50% - 0%	500 min	NP 0±250	100Vdc	220Vdc	Blue
1753525 1753544	3.0 max	10 + 50% - 0%		N 450±300	100Vdc	220Vdc	White
1753526 1753545	4.5 max	20 + 50% - 0%		N 750±300	100Vdc	220Vdc	Red
1753527 1753546	6.0 max	30 + 50% - 0%		N 1000±500	100Vdc	220Vdc	Green
1753528 1753548	10.0 max	50 + 50% - 0%	200min	N 1200±500	100Vdc	220Vdc	Brown