

Performance Specifications NPO



Capacitance Test at 25°C

Measured at 1 VRMS max. at 1 MHz $\,$ (1 KHz for more than 1000 pF $\,$)

Capacitance Tolerances

$$C = + - 0.25pF$$
 $D = + - 0.50pF$ $F = + - 1\%$
 $G = + - 2\%$ $J = + - 5\%$ $K = + - 10\%$

Operating Temperature Range

Temperature Coefficient

$$\triangle C = 0 + -30 \text{ ppm/}^{\circ} C$$

Voltage Ratings

50 & 100 Vdc

Dissipation Factor / Q Value

DF = 0.1% max. or Q : >=
$$400 + 20C$$
 Less then 30 pF
Q : >= 1000 30pF and over

Insulation Resistance

100G or 1000ohmF minimum, whichever is less. The apply rated voltage for max.of 2 min. with 50 mA limiting current at 25 $^{\rm o}$ C

Dielectric Strength

250% of rated Vdc for 5s with charging current less than 50 mA

Solderablity

75% min. covered with smooth and bright solder coating under 230 + -5° C solder bath for 4 + -1s dipping time

Resistance to Leaching

20% of the metallization of the head face may be missing under 260 + -5 C solder bath for 30 + -1.0s dipping time.

Aging Rate

0% per decade hour

Load Life

200% rated voltage at +125°C for 1000hours, Measurement shall be taken after 24 hrs stabilization.

$$\Delta_{C}$$
: < + -3 % or + - 0.3pF whichever is less

Q: >= 350 for more than 30 pF >= 275 + 2.5C for 30 pF> C >10pF >= 200 + 10C for less than 10 pF

IR: >= 1Gohm or 50 ohmF whichever is less

Humidity Test

500 hours at 40 + - 2 °C under 90 to 95% humidity.

Measurement shall be taken after 24 hrs stabilization.

$$\Delta_{C}$$
: < + - 5% or + - 0.5pF whichever is less

Q: >= 350 for more than 30 pF >= 275 + 2.5C for 30 pF> C >10pF >= 200 +10C for less than 10 pF

IR: >= 1Gohm or 50 ohmF whichever is less

Temperature Coefficient







