

# DATASHEET

## C1206X7R500-684MNP

GENERAL PURPOSE CERAMIC CAPACITORS (C SERIES)  
1206, X7R, 50V, 0.68uF,  $\pm 20\%$ , 100% matte Tin(Sn) over Nickel



VENKEL LTD.



### SIZE SPECIFICATIONS units: inches

|            |                |
|------------|----------------|
| Length:    | 0.126          |
| Width:     | 0.063          |
| T(max):    | 0.070          |
| Min E/B:   | .020 $\pm$ .01 |
| Size(EIA): | 1206           |

### COMPONENT SPECIFICATIONS

|                    |                                |
|--------------------|--------------------------------|
| Category:          | Ceramic Capacitors             |
| Series:            | General Purpose (C Series)     |
| Size:              | 1206                           |
| Dielectric:        | X7R                            |
| Voltage:           | 50V                            |
| Capacitance:       | 0.68uF                         |
| Tolerance:         | $\pm 20\%$                     |
| Termination:       | 100% matte Tin(Sn) over Nickel |
| Packaging:         | P                              |
| Quantity per Reel: | 2,000                          |

### DIELECTRIC SPECIFICATIONS

|                                 |                                                   |
|---------------------------------|---------------------------------------------------|
| Temperature Coefficient:        | 0 $\pm 15\%$ $^{\circ}\text{C}$ MAX               |
| Temperature Voltage Coefficient | X7R not applicable                                |
| Ageing:                         | 2.5% per decade hour, typical                     |
| Withstanding Voltage:           | 2.5 times VDCW                                    |
| Operating Temp:                 | -55 $^{\circ}\text{C}$ to +125 $^{\circ}\text{C}$ |
| Dissipation Factor:             | See C Series Datasheet                            |

### ENVIRONMENTAL INFORMATION

|                            |                       |
|----------------------------|-----------------------|
| RoHS Status                | 6 of 6 Compliant      |
| REACH Status               | Compliant             |
| Halogen Status             | Halogen Free          |
| Conflict Mineral Status    | Conflict Mineral Free |
| Moisture Sensitivity Level | MSL1                  |

### REFLOW PROFILE

|                          |                        |
|--------------------------|------------------------|
| Max Reflow Temperature   | 260 $^{\circ}\text{C}$ |
| Number of Reflow Cycles  | 2                      |
| Time at Max Reflow Temp. | 10 sec                 |

### REEL DIMENSIONS units: mm

| Tape | B min | C            | A(7")         | A(13")        | D Min | N Min | G            | T max |
|------|-------|--------------|---------------|---------------|-------|-------|--------------|-------|
| 8mm  | 0.30  | 13 $\pm$ .05 | 178 $\pm$ 2.0 | 330 $\pm$ 2.0 | 20.20 | 50.00 | 10 $\pm$ 1.5 | 14.90 |

### TAPING SPECIFICATIONS units: mm

| A                    | B             | W             | F             | E              | Po            |
|----------------------|---------------|---------------|---------------|----------------|---------------|
| 2.0 $\pm$ 0.2        | 3.6 $\pm$ 0.2 | 8.0 $\pm$ 0.2 | 3.5 $\pm$ 0.1 | 1.75 $\pm$ 0.1 | 4.0 $\pm$ 0.1 |
| Pz                   | D             | T             | P             | To             | T(E)          |
| 2.0 $\pm$ 0.05 - 0.0 | 1.5 $\pm$ 0.1 | 1.15 MAX      | 4.0 $\pm$ 0.1 |                |               |