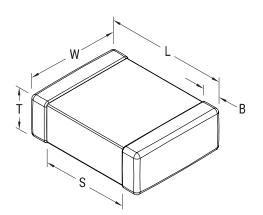
## KEMET Part Number: C0402S681K5RACAUTO



SMD Auto X7R FE, Ceramic, 680 pF, 10%, 50 VDC, X7R, SMD, MLCC, FE-CAP, Floating Electrode, Automotive Grade, 0402



| Dimensions |                 |
|------------|-----------------|
| Chip Size  | 0402            |
| L          | 1mm +/-0.05mm   |
| W          | 0.5mm +/-0.05mm |
| Т          | 0.5mm +/-0.05mm |
| S          | 0.3mm MIN       |
| В          | 0.3mm +/-0.1mm  |

| Packaging Specifications |                        |  |
|--------------------------|------------------------|--|
| Packaging:               | T&R, 180mm, Paper Tape |  |
| Packaging Quantity:      | 10000                  |  |

| General Information |                                                            |
|---------------------|------------------------------------------------------------|
| Series:             | SMD Auto X7R FE                                            |
| Style:              | SMD Chip                                                   |
| Description:        | SMD, MLCC, FE-CAP, Floating<br>Electrode, Automotive Grade |
| Features:           | FE-CAP, Floating Electrode,<br>Automotive Grade            |
| RoHS:               | Yes                                                        |
| Termination:        | Tin                                                        |
| Marking:            | No                                                         |
| Qualifications:     | AEC-Q200                                                   |
| AEC-Q200:           | Yes                                                        |
| Component Weight:   | 1210 ug                                                    |
| Shelf Life:         | 78 Weeks                                                   |
| MSL:                | 1                                                          |

| Specifications                                                            |                                                    |
|---------------------------------------------------------------------------|----------------------------------------------------|
| Capacitance:                                                              | 680 pF                                             |
| Measurement Condition:                                                    | 1 kHz 1.0Vrms                                      |
| Capacitance Tolerance:                                                    | 10%                                                |
| Voltage DC:                                                               | 50 VDC                                             |
| Dielectric Withstanding<br>Voltage:                                       | 125 VDC                                            |
| Temperature Range:                                                        | -55/+125°C                                         |
| Temperature Coefficient:                                                  | X7R                                                |
| Capacitance Change with<br>Reference to +25°C and 0 VDC<br>Applied (TCC): | 15%, 1kHz 1.0Vrms                                  |
| Dissipation Factor:                                                       | 2.5% 1 kHz 1.0Vrms                                 |
| Aging Rate:                                                               | 3% Loss/Decade Hour: Referee<br>Time is 1000 Hours |
| Insulation Resistance:                                                    | 100 GOhms                                          |

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