

**KEMET Part Number: C0603C102K5RECTU**  
(C0603C102K5REC7867)

ESD SMD Comm X7R, Ceramic, 1000 pF, 10%, 50 VDC, X7R, SMD, MLCC, Temperature Stable, Electro Static Discharge, Class II, 0603



**Dimensions**

Chip Size	0603
L	1.6mm +/-0.15mm
W	0.8mm +/-0.15mm
T	0.8mm +/-0.07mm
S	0.7mm MIN
B	0.35mm +/-0.15mm

**Packaging Specifications**

<b>Packaging:</b>	T&R, 180mm, Paper Tape
<b>Packaging Quantity:</b>	4000

**General Information**

<b>Series:</b>	ESD SMD Comm X7R
<b>Style:</b>	SMD Chip
<b>Description:</b>	SMD, MLCC, Temperature Stable, Electro Static Discharge, Class II
<b>Features:</b>	Temperature Stable, Class II
<b>RoHS:</b>	Yes
<b>Termination:</b>	Tin
<b>Marking:</b>	No
<b>AEC-Q200:</b>	No
<b>Miscellaneous:</b>	Note: KEMET 50V rated parts may be operated at 63 Volts.
<b>Shelf Life:</b>	78 Weeks
<b>MSL:</b>	1

**Specifications**

<b>Capacitance:</b>	1000 pF
<b>Measurement Condition:</b>	1 kHz 1.0Vrms
<b>Capacitance Tolerance:</b>	10%
<b>Voltage DC:</b>	50 VDC
<b>ESD Level per AEC-Q200:</b>	25,000 V ESD Level
<b>Dielectric Withstanding Voltage:</b>	125 VDC
<b>Temperature Range:</b>	-55/+125°C
<b>Temperature Coefficient:</b>	X7R
<b>Capacitance Change with Reference to +25°C and 0 VDC Applied (TCC):</b>	15%, 1kHz 1.0Vrms
<b>Dissipation Factor:</b>	2.5% 1 kHz 1.0Vrms
<b>Aging Rate:</b>	3% Loss/Decade Hour: Referee Time is 1000 Hours
<b>Insulation Resistance:</b>	100 GOhms