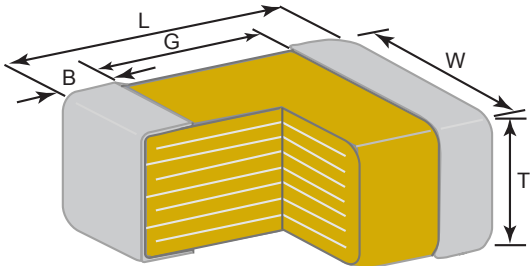
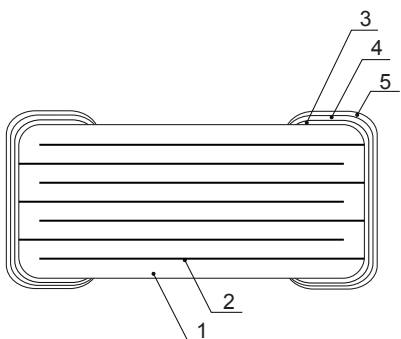


TDK MLCC Datasheet¹

TDK P/N C1608 X7R 1H 221 K T XXXX

1)
2)
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4)
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6)
7)

No.	Segment	Detail	Comments
1	Case Size	1.6 x 0.8 mm	See below for dimensions.
2	Temperature Characteristics	-55+125°C ± 15%	Class II ; Conforms to EIA 198
3	Rated Voltage	50 V	DC
4	Capacitance	220 pF	1.0 ± 0.2 Vrms , 1kHz ± 10%
5	Capacitance Tolerance	± 10%	Conforms to IEC 384-9
6	Packaging Style	Tape and Reel, 8 mm	EIA 481 Format
7	TDK internal Code	XXXX	(Internal TDK use only)
-	Dissipation Factor (DF)	0.03 max.	1.0 ± 0.2 Vrms , 1kHz ± 10%
-	Insulation Resistance	10,000 M min.	apply rated voltage for 60s

Physical Dimensions	Material System																																																						
																																																							
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Symbol</th> <th>Dimensions (mm)</th> </tr> </thead> <tbody> <tr> <td>L</td> <td>1.6 ± 0.1</td> </tr> <tr> <td>W</td> <td>0.8 ± 0.1</td> </tr> <tr> <td>T</td> <td>0.9 max.</td> </tr> <tr> <td>B</td> <td>0.2 min.</td> </tr> <tr> <td>G</td> <td>0.5 min.</td> </tr> </tbody> </table>	Symbol	Dimensions (mm)	L	1.6 ± 0.1	W	0.8 ± 0.1	T	0.9 max.	B	0.2 min.	G	0.5 min.	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="3">No.</th> <th rowspan="3">Name</th> <th colspan="4">Material</th> </tr> <tr> <th colspan="2">Class I</th> <th colspan="2">Class II</th> </tr> <tr> <th>Pd</th> <th>TME</th> <th>Pd</th> <th>TME</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Dielectric</td> <td>TiO2</td> <td>CaZrO3</td> <td colspan="2">BaTiO3</td> </tr> <tr> <td>2</td> <td>Electrode</td> <td>Pd</td> <td>Ni</td> <td>Pd</td> <td>Ni</td> </tr> <tr> <td>3</td> <td rowspan="3">Termination</td> <td>Ag or Ag/Pd</td> <td>Cu</td> <td>Ag or Ag/Pd</td> <td>Cu</td> </tr> <tr> <td>4</td> <td colspan="4" style="text-align: center;">Ni</td> </tr> <tr> <td>5</td> <td colspan="4" style="text-align: center;">Sn</td> </tr> </tbody> </table>	No.	Name	Material				Class I		Class II		Pd	TME	Pd	TME	1	Dielectric	TiO2	CaZrO3	BaTiO3		2	Electrode	Pd	Ni	Pd	Ni	3	Termination	Ag or Ag/Pd	Cu	Ag or Ag/Pd	Cu	4	Ni				5	Sn			
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¹ This datasheet gives a basic overview of the multilayer ceramic capacitor as defined in the above TDK part number. A full specification (including part number construction, available capacitance ranges, packaging and caution notes) is available upon request. The information above is subject to change by TDK without any notice.