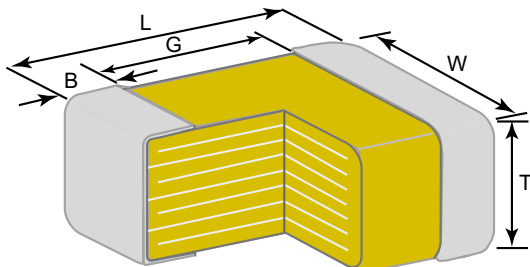
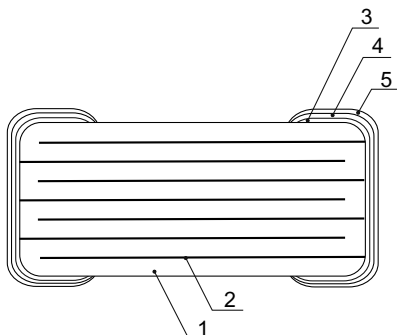


TDK MLCC Datasheet¹

TDK P/N

C1005	Y5V	1C	104	Z	T	XXXX
1)	2)	3)	4)	5)	6)	7)

No.	Segment	Detail	Comments
1	Case Size	1.0 x 0.5 mm	See below for dimensions.
2	Temperature Characteristics	-30 +85°C +22% / -82%	Class III ; Conforms to EIA 198
3	Rated Voltage	16 V	DC
4	Capacitance	100,000 pF	1.0 ± 0.2 Vrms , 1MHz ± 10%
5	Capacitance Tolerance	+80%, -20%	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)	8.5% max.	1.0 ± 0.2 Vrms , 1MHz ± 10%
-	Insulation Resistance	5000 MΩ min.	apply rated voltage for 60s

Physical Dimensions	Material System																																																						
																																																							
<table><tr><th>Symbol</th><th>Dimensions (mm)</th></tr><tr><td>L</td><td>1.0 ± 0.05</td></tr><tr><td>W</td><td>0.5 ± 0.05</td></tr><tr><td>T</td><td>0.55 max</td></tr><tr><td>B</td><td>0.15 min.</td></tr><tr><td>G</td><td>0.35 min.</td></tr></table>	Symbol	Dimensions (mm)	L	1.0 ± 0.05	W	0.5 ± 0.05	T	0.55 max	B	0.15 min.	G	0.35 min.	<table><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><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">Ni</td></tr><tr><td>5</td><td colspan="4">Sn</td></tr></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			
Symbol	Dimensions (mm)																																																						
L	1.0 ± 0.05																																																						
W	0.5 ± 0.05																																																						
T	0.55 max																																																						
B	0.15 min.																																																						
G	0.35 min.																																																						
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																																																					

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.