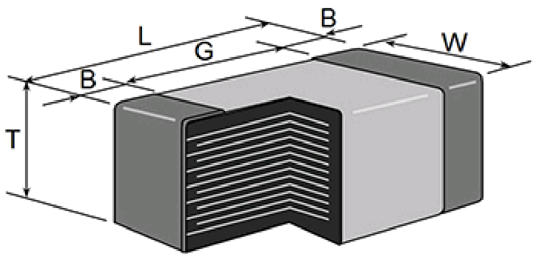
TDK MLCC Datasheet [1]

TDK P/N	C	1005	X7R	1E	682	M	T
	(1)	(2)	(3)	(4)	(5)	(6)	(7)

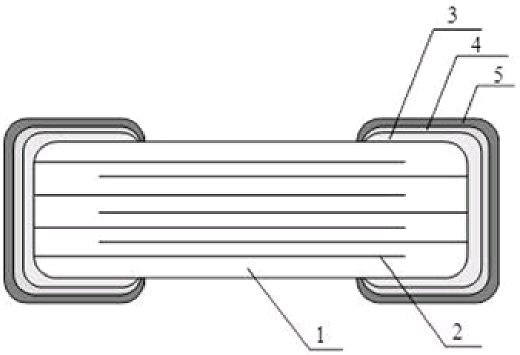
No.	Segment	Detail	Comments
(1)	TDK Series Name	C Series	General Purpose
(2)	Dimensions (mm)	1.00 x 0.50	See Below for Dimensions
(3)	Temperature Characteristic	-55°C to 125°C, ± 15%	Class II; Conforms to EIA 198.
(4)	Rated Voltage (V)	25 V	DC
(5)	Nominal Capacitance	6,800 pF	1.0±0.2Vrms; 1kHz ± 10%
(6)	Capacitance Tolerance	±20%	Conforms to IEC 384-9
(7)	Packaging Information	Punched (Paper)Taping [180mm Reel]	EIA 481 format
-	Dissipation Factor (DF)	3% Max	1.0±0.2Vrms; 1kHz ± 10%
-	Insulation Resistance (IR)	10,000 MOhm Min	Apply rated voltage for 60 secs at 25°C
-	Dielectric Withstanding (DWV)	62.5V	VDC applied for 1~5s; Charge/Discharge current ≤ 50mA
-	Storage Temperature Range	5°C to 40°C @ 20~70% RH	6 Months Maximum
-	Soldering Method	Reflow,Manual	Soldering technique based on chip shape

Physical Dimensions



Symbol	Dimensions (mm)
L	1.00 ± 0.05
W	0.50 ± 0.05
T	0.50 ± 0.05
B	0.10 Min
G	0.30 Min

Material System



No	Name	Material
		Class II
1	Dielectric	$BaTiO_3$
2	Electrode	Nickel (Ni)
3	Termination	Copper (Cu)
4		Nickel (Ni)
5		Tin (Sn)

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[1] This datasheet is to be used for reference purposes only and is subject to change by TDK without notice. It reflects an overview of the product characteristics/performance for the particular part number. For product specification information, please refer to TDK's general product specification. Please note that this standard part is not designed or warranted to meet any specifications of any intermediate or end user different from or in addition to the specifications set fort in TDK's general product specification. Note also that this standard part has not been specially designed or manufactured for, nor is it intended or warranted for use in , or permitted to be resold for, specialized applications such as aviation, medical, and/or governmental/military applications (collectively, "Excluded Applications").

Moisture Sensitivity Level 1 | Pb lead-free | REACH COMPLIANCE | RoHS Compliant