

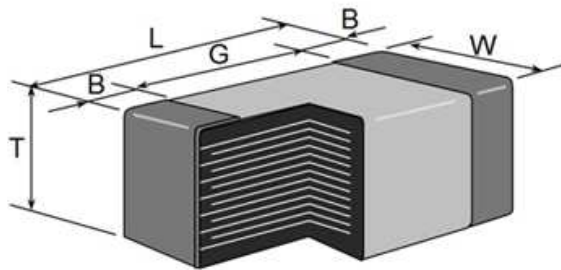


TDK MLCC Datasheet 1

TDK P/N	CGA	2B3	X7R	1H	223	K	T
	(1)	(2)(3)(4)	(5)	(6)	(7)	(8)	(9)

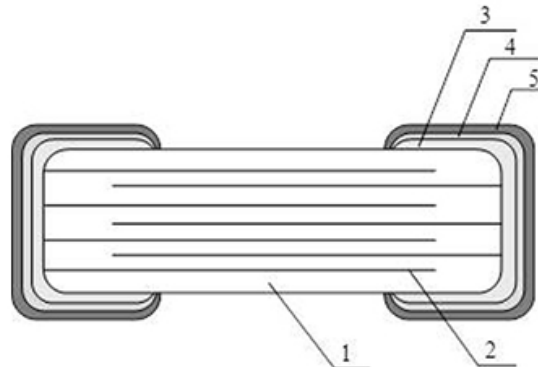
No.	Segment	Detail	Comments
(1)	TDK Series Name	CGA Series(For Automotive)	Automotive Grade - Qualification based on CDF-AEC-Q200
(2)	Dimensions (mm)	1.00 x 0.50	See Below for Dimensions
(3)	Thickness T(mm)	0.50	-
(4)	Voltage Condition for Life Test	1.5 x 50 V	Refer to TDK's CGA Specification for Test Method
(5)	Temperature Characteristic	-55°C to 125°C, ± 15%	Class II; Conforms to EIA 198.
(6)	Rated Voltage (V)	50 V	DC
(7)	Nominal Capacitance	0.022 µF	1.0±0.2Vrms; 1kHz ± 10%
(8)	Capacitance Tolerance	±10%	Conforms to IEC 384-9
(9)	Packaging Information	Punched (Paper)Taping [180mm Reel]	EIA 481 format
-	Dissipation Factor (DF)	7.5% 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)	125V	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	0.15 Min
G	0.35 Min

Material System



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

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 CGA product specification. Please note that this 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 forth in TDK's CGA product specification. Note also that this 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").

