

J01A500W103K07T



J 01 A 500 W 103 K 07 T

(1) (2) (3) (4) (5) (6) (7) (8) (9)

(1) Company title

Company title
J SHANGHAI JEMLEAD

(2) Product

Product Code
01 MULTILAYER CHIP CAPACITOR

(3) AEC-Q200

Code	AEC-Q
A	YES

(4) Rated Voltage

Code	Rated Voltage(Vdc)
500	50

(5) Temperature Characteristics

Code	Temperature Characteristics	Temperature Range
W	X7R	-55°C to +125 °C

(6) Capacitance

Code	Capacitance Range
103	0.01uF

(7) Capacitance Tolerance

Code	Tolerance
K	±10%

(8) Chip Size

Code	Length*Width
07	1.00 * 0.50

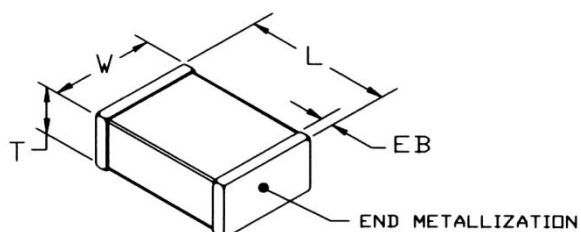
(9) Tapping

Code	Type
T	PAPER TAPE/REEL

*Supplement

Test Parameters
1 kHz ±50 Hz
@ 1.0 VRMS, 25°C

Dimensions And Structure



Mechanical Characteristics

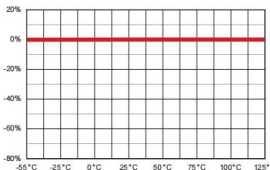
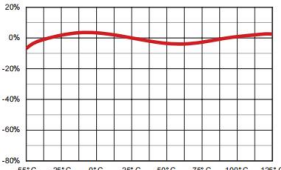
Unit: mm

LENGTH "L"	WIDTH"W"	THICKNESS"T"	ENDBAND"EB"
1.00±0.05	0.50±0.05	0.50±0.10	0.25±0.10

Electrical Characteristics

Temperature coefficient	±15% (-55°C TO +125°C)
Dissipation Factor	< 2.5% @ 1kHz, 25°C
Insulation Resistance	500 Ohm-Farad OR 50 G-Ohms, whichever is less @ WVDC, 25°C (@ 125°C IR is 10% of 25°C requirement)
Dielectric Strength	2.5 X WVDC, 50 mA max

Electrical Characteristics

PARAMETER	NP0		X7R		X5R	
TEMPERATURE COEFFICIENT:	0± 30 ppm/°C	-55 to +125°C	± 15%	-55 to +125°C	± 15%	-55 to +85°C
						
DISSIPATION FACTOR:	.001 (0.1%) max		WVDC ≥ 50 VDC, DF = 2.5% max WVDC = 25 VDC, DF = 3.0% max WVDC = 16 VDC, DF = 3.5% max		For Vrated ≥ 50 VDC, DF = 5% max For Vrated ≤ 25 VDC: DF = 10% max	
AGING:	None		2.5% / decade hour		2.5 % / decade hour	
INSULATION RESISTANCE:	1000ΩF or 100GΩ whichever is less @ 25°C, WVDC		500ΩF or 50GΩ whichever is less @ 25°C, WVDC		100ΩF or 10GΩ whichever is less @ 25°C, WVDC	
DIELECTRIC STRENGTH:	For Vrated = 6 - 200 VDC, DWV = 2.5 X WVDC, 25°C, 50mA max. For Vrated = 201 - 499 VDC, DWV = 2.0 X WVDC, 25°C, 50mA max. For Vrated = 500 - 999 VDC, DWV = 1.5 X WVDC, 25°C, 50mA max. For Vrated = 1000+ VDC, DWV = 1.2 X WVDC, 25°C, 50mA max.				DWV = 2.5 X WVDC, 25°C, 50mA max.	
TEST PARAMETERS:	C > 100 pF; 1kHz ±50Hz; 1.0±0.2 VRMS C ≤ 100 pF 1Mhz ±50kHz; 1.0±0.2 VRMS		1kHz ±50Hz; 1.0±0.2 VRMS		1kHz ±50Hz; 0.5±0.2 VRMS	
NOTES:	Tanceram IR = 100 ΩF or 10 GΩ Tanceram DF for Vrated ≥ 50 VDC = 5% max. Tanceram DF for Vrated ≤ 25 VDC, DF = 10% max					