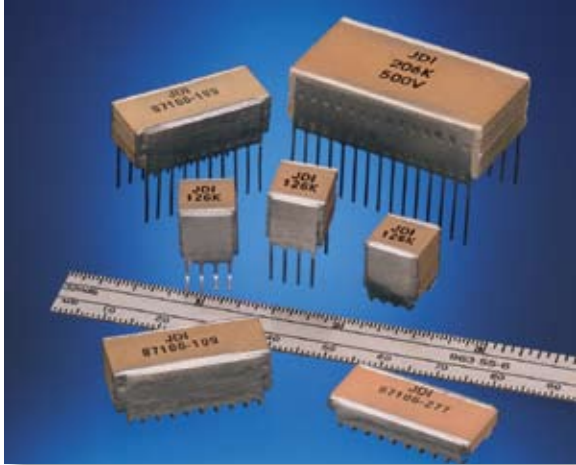


# HIGH TEMPERATURE STACKED CAPACITORS



## KEY FEATURES

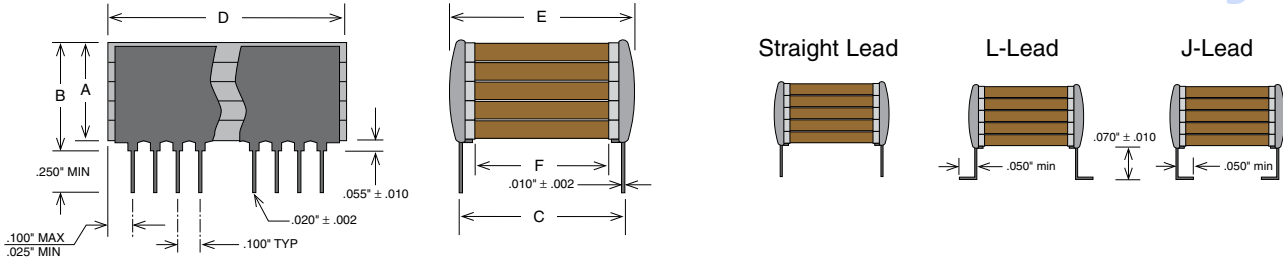
- For Use at Temperatures Up to 200°C
- Rated Working Voltages from 50V to 200V
- Rugged Stack with Hi-Temp Lead-Attachment
- MLC Designs Utilizing Military Grade Ceramics
- Custom Sizes, Voltages, and Values Available

## APPLICATIONS

- For High Temperature Applications Such As:
  - Oil Well Logging (Downhole)
  - Geophysical Probes
  - Jet Engine Controls

# Datasheet Directory

## MECHANICAL CHARACTERISTICS



## HOW TO ORDER

101	T23	W	106	K	J	4	S
<b>VOLTAGE</b>	<b>CASE SIZE</b>	<b>DIELECTRIC</b>	<b>CAPACITANCE</b>	<b>TOLERANCE</b>	<b>LEAD STYLE</b>	<b>MARKING</b>	<b>SPECIAL CODE</b>
Standard Voltages: 500 = 50 V 101 = 100 V 201 = 200 V	See Chart	N = NPO W = X7R	1st two digits are significant; third digit denotes number of zeros. 103 = .01 $\mu\text{F}$ 104 = 0.1 $\mu\text{F}$ 105 = 1.0 $\mu\text{F}$ 106 = 10 $\mu\text{F}$	J = $\pm 5\%$ * K = $\pm 10\%$ M = $\pm 20\%$  * (NPO only)	J = "J" Leads (formed in)  L = "L" Leads (formed out)  N = Straight Lead	3 = Special Mark 4 = Standard Mark 6 = EIA 2-digit	S = Other Special

Example Part number written: 101T23W106KJ4 = Rated 100 VDC@200°C, 10 $\mu\text{F}$   $\pm$  10% X7R in T23 size.



## DIELECTRIC CHARACTERISTICS

	NPO DIELECTRIC	X7R DIELECTRIC
TEMPERATURE COEFFICIENT:	0 ± 30 ppm, -55 to 125°C	0 ± 15% , -55 to 125°C
CAP DROP AT 200°C:	minus 0.5% max	minus 45% max
DISSIPATION FACTOR:	.001 (0.1%) max, 1Khz, 25°C	.025 (2.5%) max, 1KHz, 25°C
INSULATION RESISTANCE: @25 °C	1000 Ohm-Farads or 100 Gigohms whichever is less @ 25°C, WVDC	1000 Ohm-Farads or 100 Gigohms whichever is less @ 25°C, WVDC
INSULATION RESISTANCE: @200 °C	1 Ohm-Farads or 100 Megohms whichever is less @ 200°C, WVDC	1 Ohm-Farads or 100 Megohms whichever is less @ 200°C, WVDC
DIELECTRIC STRENGTH:	2.5 X WVDC, 25°C, 50 mA max	2.5 X WVDC, 25°C, 50 mA max
TEST PARAMETERS:	1Khz ± 50Hz, 1.0±0.2 VRMS, 25°C	1Khz ± 50Hz, 1.0±0.2 VRMS, 25°C

## CAPACITANCE / VOLTAGE SELECTION

Case Size	NPO Max Capacitance (µF)			X7R Max Capacitance (µF)		
	50 V	100 V	200 V	50 V	100 V	200 V
T05	.056	.047	.022	1.20	0.68	0.33
T25	0.10	.082	.039	2.20	1.20	0.68
T35	0.15	0.12	.068	3.30	1.80	1.00
T45	0.22	0.18	.082	4.70	2.70	1.20
T55	0.27	0.22	0.10	5.60	3.30	1.50
T04	0.12	0.10	.047	2.70	1.50	0.82
T24	0.22	0.18	.082	4.70	2.70	1.50
T34	0.33	0.27	0.12	8.20	3.90	2.20
T44	0.47	0.39	0.18	12.0	5.60	3.30
T54	0.56	0.56	0.27	15.0	8.20	3.90
T03	0.47	0.39	0.22	10.0	5.60	2.70
T23	0.82	0.68	0.39	18.0	10.0	4.70
T33	1.20	1.00	0.68	27.0	15.0	8.20
T43	1.80	1.50	0.82	39.0	22.0	10.0
T53	2.20	1.80	1.00	47.0	27.0	12.0

## MECHANICAL CHARACTERISTICS

Case Size	A	B	C	D	D	E	F	Leads per side
	(max."")	(max."")	±.025	(min."")	(max."")	(max."")	(min."")	
T05	.120	.185						
T25	.240	.305						
T35	.360	.425	.250	.224	.275	.300	.080	3
T45	.480	.545						
T55	.650	.715						
T04	.120	.185						
T24	.240	.305						
T34	.360	.425	.400	.350	.425	.440	.180	4
T44	.480	.545						
T54	.650	.715						
T03	.120	.185						
T23	.240	.305						
T33	.360	.425	.450	.950	1.075	.500	.180	10
T43	.480	.545						
T53	.650	.715						