

DIPPED RADIAL LEAD MULTILAYER CERAMIC CAPACITORS

NTD Series Rohs

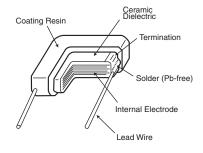
♦FEATURES

- 1. Small in size and wide capacitance range. Max. 33μ F is available.
- 2. Temperature characteristic is X7R in EIA code.
- 3. Superior humidity characteristic and long life.
- 4. Excellent high frequency characteristic due to low ESR.
- 5. High rated ripple current.
- 6. 250Vdc items are available.
- 7. Resin(UL94 V-0) used for coating.
- 8. Pb-free design(also ceramic dielectric)

APPLICATIONS

- 1. Smoothing circuit of switching mode AC-DC or DC-DC converter.
- 2. Noise suppressor for various kinds of equipments.
- 3. By-pass or decoupling circuits.
- 4. Automotive equipments.

CONSTRUCTION



RATINGS

1. Category Temperature Range	-55 to +125℃
2. Rated Voltage Range	25, 50, 100, 250 Vdc
3. Rated Capacitance Range	0.1 to 33µF
4. Rated Capacitance Tolerance	M(±20%)
5. Temperature Characteristics	X7R
6. Rated Ripple Current	See No.5 on the following table

SPECIFICATIONS

No.	Items		Specification	Test Condition				
1	Withstand Between Voltage Terminals		No abnormality.		250% of rated voltage shall be applied for 5 seconds. (Only 250Vdc products : 475V)			
		Terminals to Coating Resin						
2	2 Insulation Resistance		100/C _R (M Ω) or 4000(M Ω) whichever is less.	Rated voltage shall be applied for 60 ± 5 seconds at temperature 25 ± 2 °C.				
3	Rated Capacitance		Within specified tolerance.	CR≦10µF CR>10µF		Cr>10µF		
				Temperature	25±2℃			
4	4 Dissipation Factor		5.0% maximum.	Frequency	1±0.1kHz	120±12Hz		
				Voltage	1±0.2Vrms	0.5±0.2Vrms		



NTD_{Series}

\$SPECIFICATIONS

No.	o. Items		Specification				Test Condition				
5	Rated Ripple	Current	Size code Arms	32 0.3	43 0.8	55 1.0	10kHz to 1MHz (si Ripple voltage Vp s		e curve) hall be less than the rated voltage.		
6	6 Robustness of Tension No visible damage. Bending			lo visible damage.						(sec.) 10±1	
						Lead ϕ (mm) 0.5 max. Time : 2times.	Bending(N) 2.5		(kg) 0.25		
7	Vibration		Appearance : No Capacitance : To sp D.F. : To meet the	meet th ecificati	e initial on.		Amplitude: 1.5mmFrequency range: 10-55-10Hz (1 min)Direction and time:2 hours each to X, Y, Z axis. Total 6 hours.			,	
8	Solderability		Min. 75% of surfa shall be covered v				SolderPb FrSolder Temperature245±Dipping Time				
9	Resistance to	Soldering Heat	Appearance : No abnormality. $\Delta C/C : \pm 15\%$ D.F. : Satisfy the initial spec.			Solder Temperature : $350\pm10^{\circ}$ CDipping Time: 3 ± 0.5 sec.Depth: 1.5 to 2mm					
10	Temperature	Cycle	Appearance : No abnormality. $\Delta C/C :\pm 15\%$ D.F. : To meet the initial specification I.R. : To meet the initial specification				StepTemperature (°C)(min.)1Min. Category temperature ±330±32Room temperature3 max.3Max. Category temperature ±330±34Room temperature3 max.For 5 cycles for above temperature cycle.				
11	Humidity Loa	d Life	Appearance : No ΔC/C :±20% D.F. : 10% maxim I.R. : 25/C _R (MΩ) o w	num or 1000	-	÷.	Temperature : $40\pm 2^{\circ}$ CHumidity: 90 to 95%RHVoltage: Rated voltageTime: $500\pm_{0}^{24}$ hours				
12	Endurance		Appearance : No ΔC/C :±20% D.F. : 10% maxim I.R. : 50/CR(MΩ) α w	num or 1000	-	5.	Temperature : 125±3℃ Voltage : Rated voltage Time : 1000± ⁴⁸ / ₀ hours				

*CR : Rated Capacitance(µF)

ΝΤ Series

NIPPON CHEMI-CON

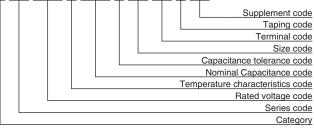
♦STANDARD RATINGS

Rated voltage	Rated Capacitance (µF)		ĺ	Dimensions(m	Maximum ripple current			
(Vdc)		Lmax.	Wmax.	Tmax.	F±0.8	φd±0.05	(Arms)	Part Number
	3.3	5.0	6.0	3.5	5.0	0.5	0.3	KTD250B335M32A0T00
	4.7	5.0				0.5		KTD250B475M32A0T00
	6.8	6.5	6.5	4.0	5.0			KTD250B685M43A0T00
25	10					0.5	0.8	KTD250B106M43A0T00
	15							KTD250B156M43A0T00
	15	7.5	9.0	4.5	5.0			KTD250B156M55A0T00
	22					0.5	1.0	KTD250B226M55A0T00
	33							KTD250B336M55A0T00
	1.0						0.3	KTD500B105M32A0T00
	1.5	5.0	6.0	3.5	5.0	0.5		KTD500B155M32A0T00
	2.2	5.0				0.5		KTD500B225M32A0T00
50	3.3							KTD500B335M32A0T00
50	4.7	6.5	6.5	4.0	5.0	0.5	0.8	KTD500B475M43A0T00
	6.8	0.5	0.5	4.0	5.0	0.5	0.0	KTD500B685M43A0T00
	10	- 7.5	9.0	4.5	5.0	0.5	1.0	KTD500B106M55A0T00
	15							KTD500B156M55A0T00
	0.33	5.0	6.0	3.5	5.0	0.5	0.3	KTD101B334M32A0T00
	0.47							KTD101B474M32A0T00
	0.68							KTD101B684M32A0T00
	1							KTD101B105M32A0T00
	1.5							KTD101B155M32A0T00
	2.2							KTD101B225M32A0T00
100	1.5	6.5	6.5	4.0	5.0	0.5	0.8	KTD101B155M43A0T00
	2.2							KTD101B225M43A0T00
	3.3							KTD101B335M43A0T00
	4.7							KTD101B475M43A0T00
	3.3	7.5	9.0	4.5	5.0	0.5	1.0	KTD101B335M55A0T00
	4.7							KTD101B475M55A0T00
	6.8			4.7				KTD101B685M55A0T00
	0.1	5.0	6.0	3.5			0.3	KTD251B104M32A0T00
	0.15				5.0	0.5		KTD251B154M32A0T00
	0.22				5.0			KTD251B224M32A0T00
250	0.33							KTD251B334M32A0T00
250	0.47	6.5	6.5	4.0	5.0	0.5	0.8	KTD251B474M43A0T00
	0.68							KTD251B684M43A0T00
	1	7.5	9.0	4.5	5.0	0.5	1.0	KTD251B105M55A0T00
	1.5			4.5		0.5		KTD251B155M55A0T00

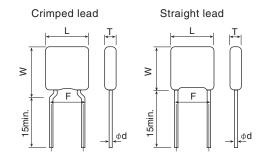
※ Please consult with us when you consider the rating other than a standard table.

♦PART NUMBERING SYSTEM

 $\stackrel{1}{\mathbf{K}} \stackrel{2}{\underline{\mathsf{TD}}} \stackrel{3}{\underline{\mathsf{5000}}} \stackrel{7}{\underline{\mathsf{600}}} \stackrel{8}{\underline{\mathsf{7}}} \stackrel{9}{\underline{\mathsf{106}}} \stackrel{10}{\underline{\mathsf{M}}} \stackrel{11}{\underline{\mathsf{55}}} \stackrel{12}{\underline{\mathsf{A00}}} \stackrel{14}{\underline{\mathsf{7}}} \stackrel{15}{\underline{\mathsf{5}}} \stackrel{16}{\underline{\mathsf{A00}}} \stackrel{17}{\underline{\mathsf{7}}} \stackrel{18}{\underline{\mathsf{000}}}$



DIMENSIONS



Please refer to "Part Numbering System" of the beginning of a catalog for the details.