



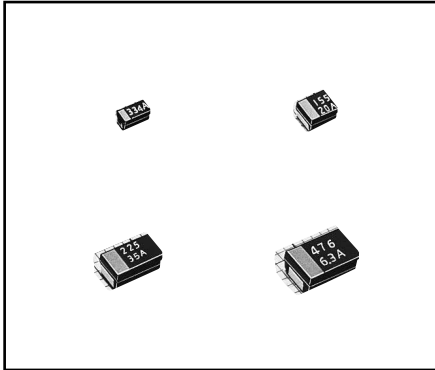
# SOLID-ELECTROLYTE TANTALUM CAPACITORS

(TANCHIP® SERIES)

**TYPE 271N**  
 Epoxy resin molding chip  
 High Reliability &  
 Withstanding High Temperature

## ⚠ CAUTIONS

- This capacitor is polarized, do not apply reverse voltage.
- The sum of peak value of AC and DC voltage should not exceed the rated voltage.
- This catalog is designed for providing general information. Please inquire of our Sales Department to confirm specifications prior to use.



Type 271, same case size as Type 267, is specially designed for use at the temperature up to 150°C.

## FEATURES

1. 271N is accomplished by development of higher purity tantalum powder and other materials, and improvement of pelleting and anodizing process condition. The feature is that solder heat resistance was improved 260°C to 330°C and temperature range of continuous usage was improved 125°C to 150°C with specified voltage derating.
2. Moisture resistance :  
85°C 85%R.H. 1000h
3. This type is especially suitable for ECU(Electronics Control Unit), Automatic Transmission and others in the engine room, and for High Reliability applications such as PBX(Private Branch Exchange).

## NOTIFICATIONS FOR USE

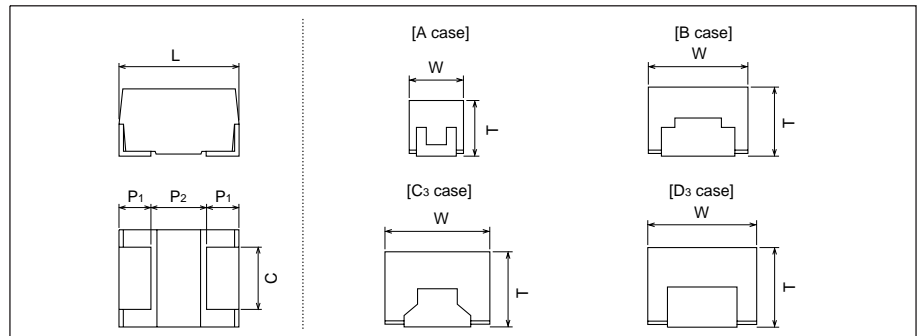
Please inquire of our Sales Department for your suitable soldering or cleaning conditions.

## CHARACTERISTICS

ITEM	CHARACTERISTICS
Failure rate level	0.5%/1000h
Operating temperature range	-55~+105°C to +150°C with voltage derating
Rated voltage	4-6.3-10-16-20-25-35VDC
Capacitance range	0.1~68μF
Capacitance tolerance	±10%, ±20%

## DIMENSIONS

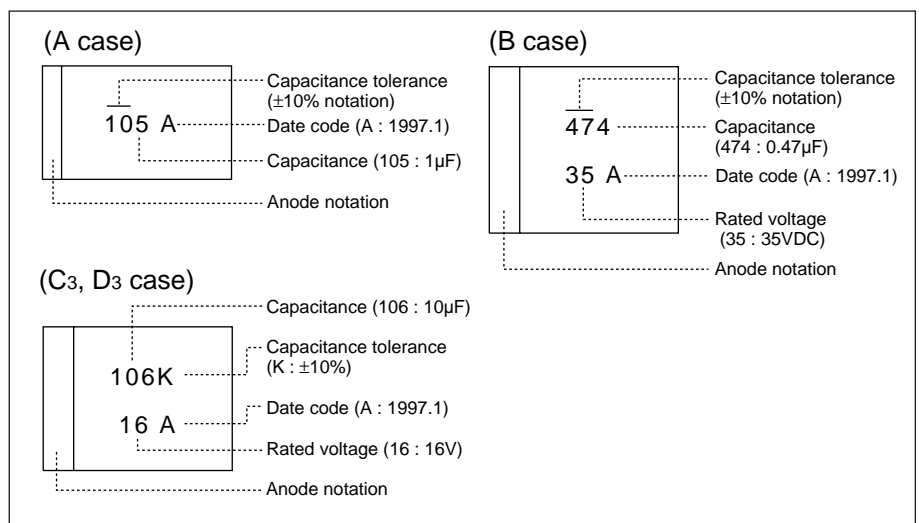
mm



Case code	EIA code	L±0.2	W±0.2	T±0.2	P1±0.2	P2 min.	C±0.1
A	3216	3.2	1.6	1.6	0.75	1.4	1.2
B	3528	3.5	2.8	1.9	0.8	1.5	2.2
C3	6032	6.0	3.2	2.5	1.3	3.0	2.2
D3	7343	7.3	4.4	2.8	1.3	4.0	2.4

A, B, C3, D3 Case is in conformity with EIA-535BAAC.

## MARKING





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## STANDARD RATINGS

Cap.	R.V.	4	6.3	10	16	20	25	35
0.1								A
0.15								A
0.22								A
0.33								A
0.47							A	B
0.68						A		B
1.0					A			B
1.5				A			B	C <sub>3</sub>
2.2			A			B		C <sub>3</sub>
3.3	A				B			C <sub>3</sub>
4.7				B			C <sub>3</sub>	D <sub>3</sub>
6.8			B			C <sub>3</sub>		D <sub>3</sub>
10	B				C <sub>3</sub>		D <sub>3</sub>	
15				C <sub>3</sub>		D <sub>3</sub>		
22			C <sub>3</sub>		D <sub>3</sub>			
33	C <sub>3</sub>			D <sub>3</sub>				
47			D <sub>3</sub>					
68	D <sub>3</sub>							

## RATINGS AND CATALOG NUMBERS

	Catalog number	cap. (μF)	case code	Max DC Lct. (μA)			Max Dissipation factor				Max ESR(Ω) 10kHz
				20°C	105°C	150°C	-55°C	20°C	105°C	150°C	
Rated voltage 4VDC/Surge voltage 5VDC	271N 4001 335 □ <sup>1</sup> □ <sup>2</sup>	3.3	A	0.3	5	6.3	0.08	0.06	0.06	0.08	7.5
	271N 4001 106 □ <sup>1</sup> □ <sup>2</sup>	10	B	0.3	5	6.3	0.08	0.06	0.06	0.08	3.0
	271N 4001 336 □ <sup>1</sup> □ <sup>2</sup>	33	C <sub>3</sub>	0.7	13	17	0.08	0.06	0.06	0.08	0.6
	271N 4001 686 □ <sup>1</sup> □ <sup>2</sup>	68	D <sub>3</sub>	1.4	27	34	0.08	0.06	0.06	0.08	0.5
Rated voltage 6.3VDC/Surge voltage 8VDC	271N 6301 225 □ <sup>1</sup> □ <sup>2</sup>	2.2	A	0.3	5	6.3	0.08	0.06	0.06	0.08	7.5
	271N 6301 685 □ <sup>1</sup> □ <sup>2</sup>	6.8	B	0.3	5	6.3	0.08	0.06	0.06	0.08	3.0
	271N 6301 226 □ <sup>1</sup> □ <sup>2</sup>	22	C <sub>3</sub>	0.7	14	17	0.08	0.06	0.06	0.08	0.6
	271N 6301 476 □ <sup>1</sup> □ <sup>2</sup>	47	D <sub>3</sub>	1.5	30	37	0.08	0.06	0.06	0.08	0.5
Rated voltage 10VDC/Surge voltage 13VDC	271N 1002 155 □ <sup>1</sup> □ <sup>2</sup>	1.5	A	0.3	5	6.3	0.08	0.06	0.06	0.08	7.5
	271N 1002 475 □ <sup>1</sup> □ <sup>2</sup>	4.7	B	0.3	5	6.3	0.08	0.06	0.06	0.08	3.0
	271N 1002 156 □ <sup>1</sup> □ <sup>2</sup>	15	C <sub>3</sub>	0.8	15	19	0.08	0.06	0.06	0.08	1.2
	271N 1002 336 □ <sup>1</sup> □ <sup>2</sup>	33	D <sub>3</sub>	1.7	33	41	0.08	0.06	0.06	0.08	1.0
Rated voltage 16VDC/Surge voltage 20VDC	271N 1602 105 □ <sup>1</sup> □ <sup>2</sup>	1.0	A	0.3	5	6.3	0.05	0.04	0.05	0.06	7.5
	271N 1602 335 □ <sup>1</sup> □ <sup>2</sup>	3.3	B	0.3	5	6.3	0.08	0.06	0.06	0.08	3.0
	271N 1602 106 □ <sup>1</sup> □ <sup>2</sup>	10	C <sub>3</sub>	0.8	16	20	0.08	0.06	0.06	0.08	1.2
	271N 1602 226 □ <sup>1</sup> □ <sup>2</sup>	22	D <sub>3</sub>	1.8	35	44	0.08	0.06	0.06	0.08	1.0
Rated voltage 20VDC/Surge voltage 26VDC	271N 2002 684 □ <sup>1</sup> □ <sup>2</sup>	0.68	A	0.3	5	6	0.05	0.04	0.05	0.06	7.5
	271N 2002 225 □ <sup>1</sup> □ <sup>2</sup>	2.2	B	0.3	5	6	0.08	0.06	0.06	0.08	3.0
	271N 2002 685 □ <sup>1</sup> □ <sup>2</sup>	6.8	C <sub>3</sub>	0.7	14	17	0.08	0.06	0.06	0.08	1.2
	271N 2002 156 □ <sup>1</sup> □ <sup>2</sup>	15	D <sub>3</sub>	1.5	30	38	0.08	0.06	0.06	0.08	1.0
Rated voltage 25VDC/Surge voltage 32VDC	271N 2502 474 □ <sup>1</sup> □ <sup>2</sup>	0.47	A	0.3	5	6.3	0.05	0.04	0.05	0.06	7.5
	271N 2502 155 □ <sup>1</sup> □ <sup>2</sup>	1.5	B	0.3	5	6.3	0.08	0.06	0.06	0.08	3.0
	271N 2502 475 □ <sup>1</sup> □ <sup>2</sup>	4.7	C <sub>3</sub>	0.6	12	15	0.08	0.06	0.06	0.08	1.2
	271N 2502 106 □ <sup>1</sup> □ <sup>2</sup>	10	D <sub>3</sub>	1.3	25	31	0.08	0.06	0.06	0.08	1.0
Rated voltage 35VDC/Surge voltage 44VDC	271N 3502 104 □ <sup>1</sup> □ <sup>2</sup>	0.1	A	0.3	5	6.3	0.05	0.04	0.05	0.06	10
	271N 3502 154 □ <sup>1</sup> □ <sup>2</sup>	0.15	A	0.3	5	6.3	0.05	0.04	0.05	0.06	10
	271N 3502 224 □ <sup>1</sup> □ <sup>2</sup>	0.22	A	0.3	5	6.3	0.05	0.04	0.05	0.06	7.5
	271N 3502 334 □ <sup>1</sup> □ <sup>2</sup>	0.33	A	0.3	5	6.3	0.05	0.04	0.05	0.06	7.5
	271N 3502 474 □ <sup>1</sup> □ <sup>2</sup>	0.47	B	0.3	5	6.3	0.05	0.04	0.05	0.06	3.0
	271N 3502 684 □ <sup>1</sup> □ <sup>2</sup>	0.68	B	0.3	5	6.3	0.05	0.04	0.05	0.06	3.0
	271N 3502 105 □ <sup>1</sup> □ <sup>2</sup>	1.0	B	0.3	5	6.3	0.05	0.04	0.05	0.06	3.0
	271N 3502 155 □ <sup>1</sup> □ <sup>2</sup>	1.5	C <sub>3</sub>	0.3	5	6.6	0.08	0.06	0.06	0.08	1.2
	271N 3502 225 □ <sup>1</sup> □ <sup>2</sup>	2.2	C <sub>3</sub>	0.4	8	9.6	0.08	0.06	0.06	0.08	1.2
	271N 3502 335 □ <sup>1</sup> □ <sup>2</sup>	3.3	C <sub>3</sub>	0.6	12	14	0.08	0.06	0.06	0.08	1.2
271N 3502 475 □ <sup>1</sup> □ <sup>2</sup>	4.7	D <sub>3</sub>	0.8	16	21	0.08	0.06	0.06	0.08	1.0	
271N 3502 685 □ <sup>1</sup> □ <sup>2</sup>	6.8	D <sub>3</sub>	1.2	24	30	0.08	0.06	0.06	0.08	1.0	

□<sup>1</sup> capacitance tolerance code "K" (±10%) or "M" (±20%)  
 □<sup>2</sup> taping code "R" ("N") or "L" ("P")  
 Pull direction "R" ("N") is standard.

