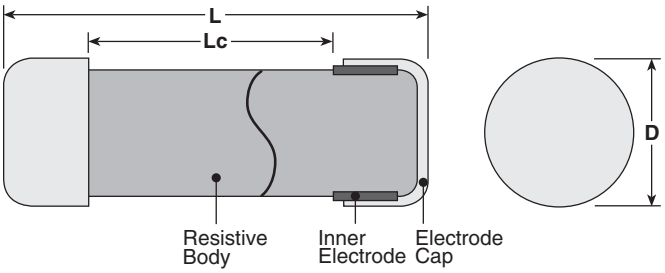
EU RoHS COMPLIANT

features

- Suitable for noise suppression of engine ignition system
- Reliable in pulse/transient applications
- Products meet EU RoHS requirements. RoHS regulation is not intended for Pb-glass contained in the electrode.

dimensions and construction



Size Code	Dimensions inches (mm) L	Lc (min.)	D	Cap Material
CPCN1/2	.421±.02 (10.7±0.5)	.213 (5.4)	.138±.004 (3.5±0.1)	Fe(Ni/Cu plating)
CPCN1	.63±.024 (16.0±0.6)	.378 (9.6)	.187±.012 (4.75±0.3)	
CPCN2N	.720±.024 (18.3±0.6)	.452 (11.5)	.187±.012 (4.75±0.3)	
CPCN2NS	.720±.024 (18.3±0.6)	.452 (11.5)	.187±.012 (4.75±0.3)	SUS304
CPCN3	.720±.024 (18.3±0.6)	.394 (10.0)	.283±.012 (7.2±0.3)	Fe(Sn/Cu plating)

ordering information

CPCN	2N	S	502	M
Type	Power Rating Symbol	Cap Material Symbol	Nominal Resistance	Tolerance
	1/2: 0.5W 1: 1.0W 2N: 1.5W 3: 2.0W	S: SUS304 Nil: Fe (plating)	2 significant figures + 1 multiplier	M: ±20%

10/29/18

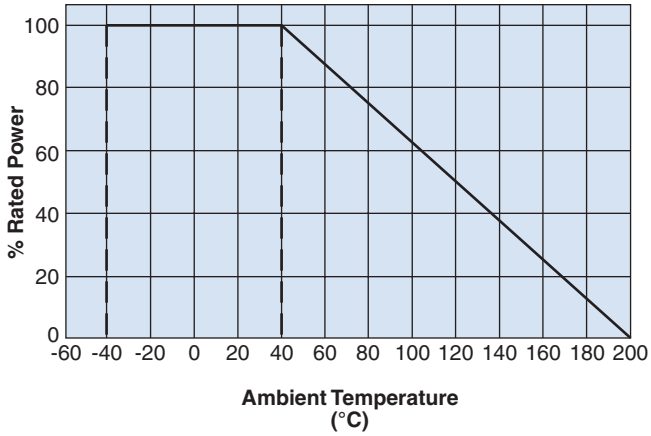
applications and ratings

Type	Power Rating	Nominal Resistance	Resistance Tolerance	T.C.R. (ppm/°C)	Maximum Working Voltage	Maximum Overload Voltage	Rated Ambient Temperature	Operating Temperature Range
CPCN1/2	0.5W	1kΩ, 5kΩ, 10kΩ, 15kΩ	M: ±20%	-1200±300	86V	215V	+40°C	-40°C to +200°C
CPCN1	1.0W				122V	305V		
CPCN2N CPCN2NS	1.5W	1kΩ, 2kΩ, 5kΩ, 10kΩ, 15kΩ			150V	375V		
CPCN3	2.0W	15kΩ			173V	432V		

Rated Voltage = $\sqrt{\text{Power Rating x Resistance Value}}$ or Maximum Working Voltage, whichever is lower.

environmental applications

Derating Curve



For resistors operated at an ambient temperature of 40°C or higher, the power rating shall be derated in accordance with this derating curve.

Performance Characteristics

Parameter	Requirement Δ R ±(%+0.05Ω) Limit	Typical	Test Method			
Resistance	Within regulated tolerance	—	Resistance	Measurement Voltage		25°C
			1kΩ, 2kΩ, 5kΩ	10V		
			10kΩ, 15kΩ	30V		
T.C.R.	-1200±300ppm/°C	—	+25°C/-40°C and +25°C/+125°C			
Voltage Coefficient	0 ~ -0.2%/V	—	Rated voltage and rated voltage x 10%			
Overload	2	0.3	Rated voltage x 2.5 or max. overload voltage for 5 seconds, whichever is less			
Load Life at High Voltage Pulse	30	—	Continuous 250h high voltage pulse on the test circuit (Refer to JIS D5111) CPCN1/2, CPCN1 in insulation oil			
Resistor Body Strength	No mechanical damages	—	Type	Holding Distance	Time	Force
			CPCN1/2	5.0 ± 0.2mm	10 seconds	98N (10kgf)
			CPCN1	9.0 ± 0.3mm		
			CPCN2N/2NS	12.3 ± 0.3mm		
			CPCN3			490N (50kgf)
Rapid Change of Temperature	5.0	—	-55°C (15 minutes), +155°C (15 minutes), 500 cycles			
Moisture Resistance	5.0	0.9	40°C ± 2°C, 90 - 95% RH, 1000 hours, 1.5 hr ON, 0.5 hr OFF cycle			
Load Life	5.0	0.7	40°C ± 2°C, 1000 hours, 1.5 hr ON, 0.5 hr OFF cycle			
Low Temperature Operation	5.0	0.7	-40°C, 24 hours			
High Temperature Exposure	5.0	2.0	+200°C, 1000 hours			

The resistance measurement before and after the examination should be performed in room temperature with difference ±1°C.

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