SM-NP SERIES

• Bi-polar type capacitors of axial lead type

- SM-NP series capacitors are suitable for use in circuits whose polarity is sometimes reversed or unknown.
- These capacitors cannot withstand a continuous AC operation.
- Non solventproof.

CHARACTERISTICS

Item	Characteristics
Operating temperature range	–40 ~ +85°C
Capacitance tolerance	±20% (M) (at 20°C, 120Hz)
Leakage current	After 1 minute: 0.06CV (μA) or 10μA, whichever is greater AFter 5 minutes: 0.03 CV (μA) or 3μA, whichever is greater Leakage current shall be measured with voltage applied to the capacitor with the polarity direction shown on the item of DIMENSIONS. (at 20°C)
tan δ	Rated Voltage (V): 16 / 25 / 50 / 63 tan δ: 0.16 / 0.16 / 0.12 / 0.10 For the capacitors exceeding 1,000μF, the specification of tan δ is increased by 0.02. (at 20°C, 120Hz)
Load life	The following specifications shall be satisfied when the capacitors are restored to 20°C after rated DC voltage applied for 1,000 hours at 85°C. During this test the rated DC voltage shall be reversed on the capacitor every 250 hours. Polarization shall be reversed every 250 hours. Capacitance change ≦±20% of the initial measured value tan δ ≦150% of the initial specified value Leakage current ≦The initial specified value
Others	Satisfies characteristic W of JIS C 5141.

CASE SIZES

T/Axial lead DxL (mm)

μF \ V	16V	25V	50V	63V
1			6.3x11	6.3x11
2.2			6.3x11	6.3x11
3.3			6.3x11	6.3x11
4.7			6.3x11	6.3x16
10			6.3x16	8x16
22			6.3x16	10x20
33		6.3x16	8x16	10x25
47	6.3x16	8x16	10x20	12.5x25
100	8x16	10x20	10x25	12.5x30
220	8x20	10x25	12.5x25	16x30
330	10x25	12.5x25	16x30	
470	10x25	12.5x25		
1,000	12.5x30			
2,200	16x30			

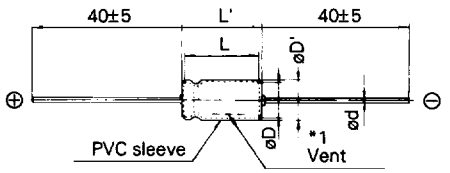
RIPPLE CURRENT

(mA rms) at 85°C, 120Hz

μF \ V	16V	25V	50V	63V
1			17	18
2.2			25	27
3.3			31	34
4.7			37	43
10			58	76
22			87	121
33		91	126	176
47	110	123	178	230
100	169	226	280	363
220	277	357	454	600
330	406	480	672	
470	469	561		
1,000	824			
2,200	1344			

DIMENSIONS

VB/Radial lead Unit (mm)



øD	ød	L'
6.3	0.6	L+1.5
8	0.6	L+1.5
10	0.6	L+1.5
12.5	0.6	L+1.5
16	0.8	L+2.0

Note: *1 Applied only to øD = 10 mm and up.