# Metallized Polyester Film Stacked Capacitor MPEM

# **Outline Drawing**

Are non-inductively wound with metallized polyester film as dielectric/electrode with copper-clad steel leads and epoxy resin coating.

# **Features**

Long life due to self-healing effect and high capacitance rate

Epoxy resin powder coating provides the identical outer appearance

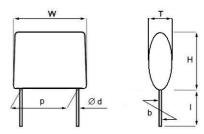
Suitable for blocking, by-pass and coupling of DC and signals to VHF range

Widely used in filter, noise suppression and low pulse circuits

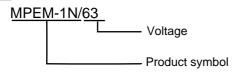


# **Specifications**

Reference Standard	IEC 60384-12	
Climatic Category	40/85/21	
Rated Voltage	63V, 100V, 250V, 400V, 630V	
Voltage proof	1.6Ur(5s)	
Dissipation Factor	≤0.8% (20°C, 1KHz)	
Insulation Resistance	≥15000M (CR≤0.33uF) ≥5000s (CR>0.33uF)	(20℃, 1min)



# Ordering code



#### **Dimensions**

MPEM-1.2N 0 MPEM-1.5N 0 MPEM-1.5N 0 MPEM-2.2N 0 MPEM-2.2N 0 MPEM-3.3N 0 MPEM-3.3N 0 MPEM-3.9N 0 MPEM-5.6N 0 MPEM-5.6N 0 MPEM-5.6N 0 MPEM-5.6N 0 MPEM-5.6N 0 MPEM-6.8N 0 MPEM-12N 0 MPEM-12N 0 MPEM-15N	uF 0.001 0.0012 0.0015 0.0018 0.0022 0.0039 0.0047 0.018 0.022 0.012 0.018 0.029 0.019 0.019 0.019 0.019 0.019 0.019 0.019 0.019 0.019 0.019 0.033 0.039 0.047 0.047 0.039 0.047 0.056	W (mm) 7.2 7.2 7.2 7.2 7.2 7.2 7.2 7.2 7.2 7.2	63 VDC T (mm) 3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2	Hmm) 6.5 6.5 6.5 6.5 6.5 6.5 6.5 6.5 6.5 6.5	P (mm) 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0	d(¢mm) 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5	W (mm) 7.2 7.2 7.2 7.2 7.2 7.2 7.2 7.2 7.2 7.2	T (mm) 3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2	Hmm) 6.5 6.5 6.5 6.5 6.5 6.5 6.5 6.5 6.5 6.5	P (mm) 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5	d(¢mm 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5
MPEM-1.2N 0 MPEM-1.5N 0 MPEM-1.5N 0 MPEM-2.2N 0 MPEM-2.7N 0 MPEM-3.3N 0 MPEM-3.9N 0 MPEM-5.6N 0 MPEM-5.6N 0 MPEM-5.6N 0 MPEM-5.6N 0 MPEM-10N 0	0.0012 0.0015 0.0015 0.0018 0.0022 0.0027 0.0033 0.0039 0.0047 0.0056 0.0068 0.0082 0.015 0.015 0.015 0.015 0.033 0.039	7.2 7.2 7.2 7.2 7.2 7.2 7.2 7.2 7.2 7.2	3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2	6.5 6.5 6.5 6.5 6.5 6.5 6.5 6.5 6.5 6.5	5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0	0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5	7.2 7.2 7.2 7.2 7.2 7.2 7.2 7.2 7.2	3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2	6.5 6.5 6.5 6.5 6.5 6.5 6.5	0.5 0.5 0.5 0.5 0.5 0.5 0.5	0.5 0.5 0.5 0.5 0.5 0.5 0.5
PEM-1.2N   0       PEM-1.5N   0       PEM-1.5N   0       PEM-1.5N   0       PEM-2.2N   0       PEM-2.3N   0       PEM-3.3N   0       PEM-3.3N   0       PEM-5.6N   0       PEM-5.6N   0       PEM-5.6N   0       PEM-6.8N   0       PEM-12N   0       PEM-15N   0       PEM-15N   0       PEM-15N   0       PEM-15N   0       PEM-39N   0       PEM-12N   0       PEM-13N   0       PEM-13N   0       PEM-13N   0       PEM-13N   0       PEM-13N   0       PEM-13N   0       PEM-33N   0       PEM-47N   0	0.0012 0.0015 0.0015 0.0018 0.0022 0.0027 0.0033 0.0039 0.0047 0.0056 0.0068 0.0082 0.015 0.015 0.015 0.015 0.033 0.039	7.2 7.2 7.2 7.2 7.2 7.2 7.2 7.2 7.2 7.2	3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2	6.5 6.5 6.5 6.5 6.5 6.5 6.5 6.5 6.5 6.5	5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0	0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5	7.2 7.2 7.2 7.2 7.2 7.2 7.2 7.2 7.2	3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2	6.5 6.5 6.5 6.5 6.5 6.5 6.5	0.5 0.5 0.5 0.5 0.5 0.5 0.5	0.5 0.5 0.5 0.5 0.5 0.5 0.5
IPEM-1.8N   0	0.0018 0.0022 0.0027 0.0027 0.0033 0.0039 0.0047 0.0056 0.0082 0.01 0.012 0.015 0.018 0.022 0.033 0.039	7.2 7.2 7.2 7.2 7.2 7.2 7.2 7.2 7.2 7.2	3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2	6.5 6.5 6.5 6.5 6.5 6.5 6.5 6.5 6.5	5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0	0.5 0.5 0.5 0.5 0.5 0.5 0.5	7.2 7.2 7.2 7.2 7.2 7.2 7.2 7.2	3.2 3.2 3.2 3.2 3.2 3.2 3.2	6.5 6.5 6.5 6.5 6.5 6.5	0.5 0.5 0.5 0.5 0.5 0.5 0.5	0.5 0.5 0.5 0.5 0.5 0.5
IPEM-2.2N   0     IPEM-2.7N   0     IPEM-3.3N   0     IPEM-3.9N   0     IPEM-4.7N   0     IPEM-4.7N   0     IPEM-4.7N   0     IPEM-6.8N   0     IPEM-8.2N   0     IPEM-15N   0     IPEM-2N   0     IPEM-33N   0     IPEM-39N   0     IPEM-68N   0     IPEM-68N   0     IPEM-68N   0     IPEM-12N   0     IPEM-12N   0     IPEM-13N   0     IPEM-13N   0     IPEM-14N   0     IPEM-15N   0     IPEM-15N   0     IPEM-15N   0     IPEM-13N   0     IPEM-13N   0     IPEM-13N   0     IPEM-13N   0     IPEM-13N   0     IPEM-33N   0     IPEM-33N   0   IPEM-33N   0     IPEM-33N   0     IPEM-33N   0     IPEM-33N   0     IPEM-33N   0     IPEM-47N   0	0.0022 0.0027 0.0033 0.0039 0.0047 0.0056 0.0068 0.0082 0.01 0.015 0.015 0.018 0.022 0.033 0.039 0.047	7.2 7.2 7.2 7.2 7.2 7.2 7.2 7.2 7.2 7.2	3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2	6.5 6.5 6.5 6.5 6.5 6.5 6.5 6.5	5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0	0.5 0.5 0.5 0.5 0.5 0.5 0.5	7.2 7.2 7.2 7.2 7.2 7.2	3.2 3.2 3.2 3.2 3.2	6.5 6.5 6.5 6.5 6.5	0.5 0.5 0.5 0.5 0.5	0.5 0.5 0.5 0.5 0.5
PEM-2.7N   0   PEM-3.3N   0   PEM-4.7N   0   PEM-4.7N   0   PEM-6.8N   0   PEM-6.8N   0   PEM-6.8N   0   PEM-10N   1   PEM-12N   0   PEM-33N   0   PEM-33N   0   PEM-68N	0.0027 0.0033 0.0039 0.0047 0.0056 0.0068 0.0082 0.01 0.012 0.015 0.018 0.022 0.033 0.039 0.047	7.2 7.2 7.2 7.2 7.2 7.2 7.2 7.2 7.2 7.2	3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2	6.5 6.5 6.5 6.5 6.5 6.5 6.5 6.5	5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0	0.5 0.5 0.5 0.5 0.5 0.5 0.5	7.2 7.2 7.2 7.2 7.2 7.2	3.2 3.2 3.2 3.2 3.2	6.5 6.5 6.5 6.5 6.5	0.5 0.5 0.5 0.5 0.5	0.5 0.5 0.5 0.5 0.5
PEM-3.3N   0   PEM-3.9N   0   PEM-5.6N   0   PEM-6.8N   0   PEM-6.8N   0   PEM-6.8N   0   PEM-12N   0   PEM-12N   0   PEM-12N   0   PEM-12N   0   PEM-13N   0   PEM-13N   0   PEM-12N   0   PEM-13N   0   PEM-12N   0   PEM-12N   0   PEM-13N   0   PEM-12N   0   PEM-13N   0   PEM-12N   0   PEM-13N	0.0033 0.0039 0.0047 0.0056 0.0068 0.0082 0.01 0.012 0.015 0.018 0.022 0.033 0.039	7.2 7.2 7.2 7.2 7.2 7.2 7.2 7.2 7.2 7.2	3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2	6.5 6.5 6.5 6.5 6.5 6.5	5.0 5.0 5.0 5.0 5.0 5.0	0.5 0.5 0.5 0.5 0.5	7.2 7.2 7.2 7.2	3.2 3.2 3.2	6.5 6.5 6.5	0.5 0.5 0.5	0.5 0.5 0.5
PEM-3.3N 0 PEM-3.9N 0 PEM-4.7N 0 PEM-5.6N 0 PEM-6.8N 0 PEM-8.2N 0 PEM-10N 0 PEM-12N 0 IPEM-12N 0 IPEM-12N 0 IPEM-13N 0 IPEM-33N 0 IPEM-38N 0 IPEM-56N 0 IPEM-56N 0 IPEM-56N 0 IPEM-82N 0 IPEM-82N 0 IPEM-82N 0 IPEM-82N 0 IPEM-83N 0 IPEM-10N IPEM-120N 0 IPEM-130N 0 IPEM-130N 0 IPEM-130N 0 IPEM-230N 0 IPEM-330N 0 IPEM-330N 0 IPEM-330N 0 IPEM-330N 0 IPEM-390N 0 IPEM-470N 0 IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	0.0033 0.0039 0.0047 0.0056 0.0068 0.0082 0.01 0.012 0.015 0.018 0.022 0.033 0.039	7.2 7.2 7.2 7.2 7.2 7.2 7.2 7.2 7.2 7.2	3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2	6.5 6.5 6.5 6.5 6.5 6.5	5.0 5.0 5.0 5.0 5.0 5.0	0.5 0.5 0.5 0.5 0.5	7.2 7.2 7.2 7.2	3.2 3.2 3.2	6.5 6.5 6.5	0.5 0.5 0.5	0.5 0.5 0.5
PEM-3.9N 0 PEM-4.7N 0 PEM-6.8N 0 PEM-6.8N 0 PEM-6.8N 0 IPEM-10N I IPEM-110N I IPEM-15N C IPEM-15N C IPEM-39N C IPEM-39N C IPEM-68N C IPEM-12N C	0.0039 0.0047 0.0056 0.0068 0.0082 0.01 0.012 0.015 0.018 0.022 0.033 0.039	7.2 7.2 7.2 7.2 7.2 7.2 7.2 7.2 7.2 7.2	3.2 3.2 3.2 3.2 3.2 3.2 3.2	6.5 6.5 6.5 6.5 6.5	5.0 5.0 5.0 5.0 5.0	0.5 0.5 0.5	7.2 7.2	3.2	6.5	0.5	0.5
PEM-5.6N   0   PEM-6.8N   0   PEM-8.2N   0   PEM-10N     PEM-12N   0   PEM-15N   C   PEM-15N   C   PEM-22N   C   PEM-38N   C   PEM-56N   C   PEM-10N   PEM-120N   PEM-120N   PEM-120N   PEM-180N   PEM-180N   PEM-130N   PEM-220N   PEM-330N   PEM-330N   PEM-330N   PEM-330N   PEM-390N   PEM-390N   PEM-390N   PEM-390N   PEM-390N   PEM-390N   PEM-390N   PEM-390N   PEM-390N   PEM-470N   PEM-390N   PEM-390N   PEM-390N   PEM-390N   PEM-390N   PEM-470N   P	0.0056 0.0068 0.0082 0.01 0.012 0.015 0.018 0.022 0.033 0.039 0.047	7.2 7.2 7.2 7.2 7.2 7.2 7.2 7.2 7.2	3.2 3.2 3.2 3.2 3.2 3.2 3.2	6.5 6.5 6.5 6.5 6.5	5.0 5.0 5.0 5.0	0.5 0.5 0.5	7.2 7.2	3.2	6.5	0.5	0.5
PEM-6.8N	0.0068 0.0082 0.01 0.012 0.015 0.018 0.022 0.033 0.039	7.2 7.2 7.2 7.2 7.2 7.2 7.2	3.2 3.2 3.2 3.2 3.2	6.5 6.5 6.5	5.0 5.0	0.5		3.2	6.5	0.5	
PEM-8.2N 0.1 PEM-10N 0.1 PEM-12N 0.1 PEM-15N 0.1 PEM-15N 0.1 PEM-33N 0.1 PEM-33N 0.1 PEM-56N 0.1 PEM-56N 0.1 PEM-56N 0.1 PEM-10N 0.1 PEM-12N 0.1 PEM-12N 0.1 PEM-12N 0.1 PEM-13N 0.1 PEM-13N 0.1 PEM-13N 0.1 PEM-13N 0.1 PEM-13N 0.1 PEM-13N 0.1 PEM-33N 0.1 PEM-33N 0.1 PEM-33N 0.1 PEM-33N 0.1 PEM-39N 0.1	0.0082 0.01 0.012 0.015 0.018 0.022 0.033 0.039 0.047	7.2 7.2 7.2 7.2 7.2 7.2	3.2 3.2 3.2 3.2	6.5 6.5	5.0						
MPEM-10N MPEM-12N MPEM-15N MPEM-15N MPEM-18N MPEM-22N MPEM-39N MPEM-47N MPEM-68N MPEM-68N MPEM-120N MPEM-120N MPEM-140N MPEM-180N MPEM-1	0.01 0.012 0.015 0.018 0.022 0.033 0.039 0.047	7.2 7.2 7.2 7.2 7.2 7.2	3.2 3.2 3.2 3.2	6.5 6.5	5.0		7.2	3.2	6.5	0.5	0.5
PEM-10N	0.01 0.012 0.015 0.018 0.022 0.033 0.039 0.047	7.2 7.2 7.2 7.2 7.2	3.2 3.2 3.2	6.5		0.5	7.2	3.2	6.5	0.5	0.5
PEM-12N	0.012 0.015 0.018 0.022 0.033 0.039 0.047	7.2 7.2 7.2 7.2	3.2 3.2		5.0	0.5	7.2	3.2	6.5	0.5	0.5
MPEM-15N CMPEM-18N CMPEM-3N CMPEM-3N CMPEM-3N CMPEM-56N CMPEM-56N CMPEM-56N CMPEM-120N PEM-120N PEM-180N PEM-120N PEM-220N PEM-330N PEM-390N PEM-390N PEM-390N PEM-470N CMPEM-470N CMPEM-470N CMPEM-30N PEM-470N CMPEM-30N PEM-470N CMPEM-470N CMP	0.015 0.018 0.022 0.033 0.039 0.047	7.2 7.2 7.2	3.2		5.0	0.5	7.2	3.2	6.5	0.5	0.5
MPEM-18N CMPEM-12N CMPEM-33N CMPEM-39N CMPEM-56N CMPEM-68N CMPEM-120N PEM-120N PEM-180N PEM-180N PEM-220N PEM-330N PEM-330N PEM-390N PEM-470N CMPEM-470N C	0.018 0.022 0.033 0.039 0.047	7.2 7.2		6.5	5.0	0.5	7.2	3.2	6.5	0.5	0.5
IPEM-22N (1PEM-33N (1PEM-33N (1PEM-47N (1PEM-56N (1PEM-82N (1PEM-82N (1PEM-150N (1PEM-15	0.022 0.033 0.039 0.047	7.2	3.2	6.5	5.0	0.5	7.2	3.2	6.5	0.5	0.5
IPEM-33N C1 IPEM-39N C1 IPEM-56N C1 IPEM-56N C1 IPEM-56N C1 IPEM-82N C1 IPEM-100N C1 IPEM-120N C1 IPEM-130N C1 IPEM-130N C1 IPEM-330N C1 IPEM-330N C1 IPEM-390N C	0.033 0.039 0.047		3.2	6.5	5.0	0.5	7.2	3.2	6.5	0.5	0.5
PEM-39N   C     PEM-39N   C     PEM-56N   C     PEM-68N   C     PEM-10N   PEM-120N     PEM-120N   PEM-150N     PEM-180N   PEM-220N     PEM-220N   PEM-330N     PEM-330N   PEM-390N     PEM-390N   PEM-370N     PEM-470N   PEM-470N	0.039 0.047	7.2	3.2	6.5	5.0	0.5	7.2	3.2	6.5	0.5	0.5
IPEM-47N (1) IPEM-56N (1) IPEM-68N (1) IPEM-82N (1) IPEM-100N (1) IPEM-120N (1) IPEM-150N (1) IPEM-150N (1) IPEM-270N (1) IPEM-330N (1) IPEM-390N (1) IPEM-470N (1) IPEM-470N (1) IPEM-470N (1) IPEM-470N (1) IPEM-470N (1)	0.047	7.2	3.2	6.5	5.0	0.5	7.2	3.2	6.5	0.5	0.5
IPEM-56N CI IPEM-68N CI IPEM-82N CI IPEM-100N PEM-120N PEM-130N PEM-220N PEM-220N PEM-330N PEM-330N PEM-390N PEM-390N PEM-470N IPEM-470N		7.2	3.2	6.5	5.0	0.5	7.2	3.2	6.5	0.5	0.5
IPEM-68N (CIPEM-68N (CIPEM-82N (CIPEM-10N (CIPEM-120N (CIPEM-150N (CIPEM-180N (CIPEM-270N (CIPEM-330N (CIPEM-390N (CIPEM-470N		7.2	3.2	6.5	5.0	0.5	7.2	3.2	6.5	0.5	0.5
IPEM-82N	0.068	7.2	3.2	6.5	5.0	0.5	7.2	3.2	6.5	0.5	0.5
PEM-100N PEM-120N PEM-150N PEM-180N PEM-220N PEM-270N PEM-330N PEM-390N PEM-470N	0.082	7.2	4.0	8.0	5.0	0.5	7.2	4.0	7.0	0.5	0.5
PEM-120N PEM-150N PEM-180N PEM-220N PEM-270N PEM-330N PEM-390N PEM-470N	0.1	7.2	4.0	8.0	5.0	0.5	7.2	4.0	7.0	0.5	0.5
PEM-150N (PEM-180N (PEM-220N (PEM-270N (PEM-330N (PEM-390N (PEM-470N (PEM-47	0.12	7.2	4.0	8.0	5.0	0.5	7.2	5.0	7.5	0.5	0.5
PEM-180N PEM-220N PEM-270N PEM-330N PEM-390N PEM-470N	0.15	7.2	4.0	8.0	5.0	0.5	7.2	5.0	7.5	0.5	0.6
PEM-220N (PEM-270N (PEM-330N (PEM-390N (PEM-470N (PEM-47	0.18	7.2	4.0	8.0	5.0	0.5	7.2	5.0	10.0	0.5	0.6
PEM-270N PEM-330N PEM-390N PEM-470N	0.22	7.2	4.0	8.0	5.0	0.5	7.2	5.0	10.0	0.5	0.6
PEM-330N PEM-390N PEM-470N	0.27	7.2	4.5	8.0	5.0	0.5	7.2	6.0	11.0	0.5	0.6
PEM-390N PEM-470N	0.33	7.2	4.5	8.0	5.0	0.5	7.3	8.0	11.0	0.5	0.6
PEM-470N	0.39	7.5	4.5	9.0	5.0	0.5	7.3	0.0		0.0	0.0
	0.47	7.5	4.5	9.0	5.0	0.5	7.2	6.0	11.0	5.0	0.5
	0.56	7.5	5.2	10.0	5.0	0.5	7.2	0.0	11.0	0.0	0.0
	0.68	7.5	5.2	10.0	5.0	0.5	7.2	6.0	11.0	5.0	0.6
	0.82	7.5	6.0	11.0	5.0	0.5	7.2	0.0	11.0	0.0	0.0
MPEM-1U	1	7.5	8.0	11.0	5.0	0.5	7.2	6.0	11.0	7.5	0.6
IPEM-2.2U	2.2	7.2	6.0	11.0	5.0	0.5	7.2	6.0	11.0	7.5	0.6
		1.2	250 VDC	11.0	0.0	0.0	7.2	0.0	11.0	7.5	0.0
PEM-100N	0.1	12.0	4.0	9.0	10.0	0.6					
	0.22	12.0	7.0	11.0	10.0	0.6					
	0.22	18.0	7.0	14.0	15.0	0.8					
MPEM-1U	1	23.0	7.0	14.0	20.0	0.8					
IPEM-2.2U	2.2	23.0	12.0	20.0	20.0	0.5					
II LIVI-2.20	2.2	25.0	400 VDC	20.0	20.0	0.5					
PEM-100N	0.1	12.0	5.0	10.0	10.0	0.8					
	0.1	18.0	6.0	11.0	15.0	0.8					
	0.22	23.0	7.0	14.0	20.0	0.8					
MPEM-1U	1	23.0	9.0	18.0	20.0	0.8					
VIF LIVI- I U		23.0	630 VDC	10.0	20.0	0.6					
IDEM 10N	0.04	12.0		9.0	10.0	0.6					
	0.01	12.0	4.0	8.0	10.0	0.6	I				
	0.022	12.0	4.0	8.0	10.0	0.6					
	0.033	12.0	5.0	9.0	10.0	0.6	I				
MPEM-47N ( IPEM-100N	0.047	12.0 18.0	5.5 6.0	11.0 12.0	10.0 15.0	0.6 0.8					