

### INTRODUCTION

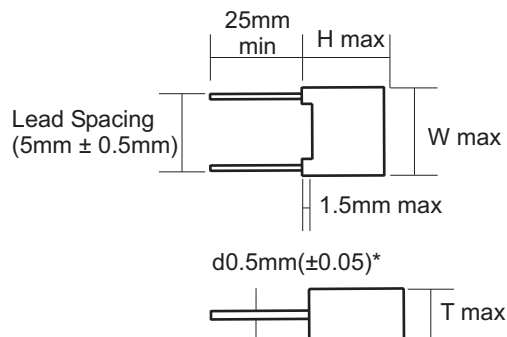
MEM Series are polyethylene terephthalate (polyester) stacked-film technology. They feature a high dv/dt and are non-inductive. These capacitors are ideal for many applications where small size and high dv/dt is important.

### FEATURES

- High pulse strength (dv/dt)
- Small Size
- Excellent Price
- 5mm Lead space

### SPECIFICATIONS

Type	Performance
Operating Temperature Range	-55°C ~ 105°C
Capacitance Range	0.001 $\mu$ F ~ 1.0 $\mu$ F
Capacitance Tolerance	+ 5% (J) + 10% (K) + 20% (M)
Rated Voltage	50/63V, 100V, 250V, 250V, 400V, 630V
Dissipation Factor	0.8% MAX at 1kHz, 20°C
Insulation Resistance	$C \leq 0.33 \mu\text{F} \geq 3750\text{M} \Omega$ ; $0.33 \mu\text{F} \geq 1250\text{S}$ ; (=2A)
	$C \leq 0.33 \mu\text{F} \geq 7500\text{M} \Omega$ ; $C > 0.33 \mu\text{F} \geq 2500\text{S}$ ; ( $\geq 2\text{E}$ )



### PERFORMANCE

Test Characteristics	Test Methods JIS C 5102	Performance				
Withstand voltage: Between terminals	Apply 1.4 times of rated voltage for 5 sec charge discharge current must be 1A Max	Shall be no abnormality				
Withstand voltage: Between terminals & enclosure	Apply 1.6 times of rated voltage for 1 to 5 sec	Shall be no abnormality				
Insulation resistance: Between terminals	Apply rated voltage $\pm 15\%$ for 60 sec. when rated voltage under 100V. Apply 100V $\pm 15\%$ when rated voltage from 100V to 500V at 20°C	$C \leq 0.33 \mu\text{F} \geq 3750\text{M} \Omega$ $C > 0.33 \mu\text{F} \geq 1250\text{S}$ ; ( $\leq 2\text{A}$ )				
Insulation resistance: Between terminals & enclosure		$C < 0.33 \mu\text{F} \geq 3750\text{M} \Omega$ $C > 0.33 \mu\text{F} \geq 2500\text{S}$ ; ( $\geq 2\text{E}$ )				
Heat proof: Insulation resistance at 85°C	Testing temperature: $85 \pm 2^\circ\text{C}$	$C < 0.33 \mu\text{F} \geq 3750\text{M} \Omega$ $C > 0.33 \mu\text{F} \geq 1250\text{S}$ ; ( $\leq 2\text{A}$ )				
Heat proof: Rate of variation of capacitance at 85°C		$C < 0.33 \mu\text{F} \geq 3750\text{M} \Omega$ $C > 0.33 \mu\text{F} \geq 2500\text{S}$ ; ( $\geq 2\text{E}$ )				
Category voltage Vc	$T \leq 85^\circ\text{C}$ : $V_c = 1.0$ , $V_R$ or $1.0 \text{ Vrms}$	Within $\pm 5\%$ of the value before test				
Operation with dc voltage or ac voltage Vrms up to 60 Hz	$T \leq 100^\circ\text{C}$ : $V_c = 1.0$ , $V_R$ or $0.8 \text{ Vrms}$					
Category voltage for short operating periods	$T \leq 100^\circ\text{C}$ : $V_c = 1.25$ , $V_R$ or $1.0 \text{ Vrms}$ for max. 2,000h $T \leq 125^\circ\text{C}$ : $V_c = 0.5$ , $V_R$ or $0.5 \text{ Vrms}$ for max. 1,000h					
Dissipation factor $\tan \delta$ (in $10^3$ ) at 20°C (upper limit values)	At	$CR \leq 0.1 \mu\text{F}$	$0.1 \mu\text{F} < CR \leq 1.0 \mu\text{F}$	$CR > 1.0 \mu\text{F}$		
		1kHz	8	8	10	
		10kHz	15	15	-	
		100kHz	30	-		
Reference Standard	GB 7332 (IEC 60384-2) JIS C 5102					

### PART NUMBER EXAMPLE MEM 104 J 1J 050 B 250 S

•Contact RFE International, Inc. for specifications not found.

**DIMENSIONS**

(μF)	W.V. Code	50/63VDC				100VDC				250VDC				400VDC				500VDC				630VDC			
		1H/1J				2A				2E				2G				2H				2J			
		160v/μs				200v/μs				250v/μs				400v/μs				700v/μs				800v/μs			
		W	H	T	d	W	H	T	d	W	H	T	d	W	H	T	d	W	H	T	d	W	H	T	d
0.0010	102	7.2	6.5	2.5	0.5	7.2	6.5	2.5	0.5	7.2	6.5	2.5	0.5	7.2	6.5	2.5	0.5	7.2	6.5	2.5	0.5	7.2	6.5	2.5	0.5
0.0012	122	7.2	6.5	2.5	0.5	7.2	6.5	2.5	0.5	7.2	6.5	2.5	0.5	7.2	6.5	2.5	0.5	7.2	6.5	2.5	0.5	7.2	6.5	2.5	0.5
0.0015	152	7.2	6.5	2.5	0.5	7.2	6.5	2.5	0.5	7.2	6.5	2.5	0.5	7.2	6.5	2.5	0.5	7.2	6.5	2.5	0.5	7.2	6.5	2.5	0.5
0.0018	182	7.2	6.5	2.5	0.5	7.2	6.5	2.5	0.5	7.2	6.5	2.5	0.5	7.2	6.5	2.5	0.5	7.2	6.5	2.5	0.5	7.2	7.5	3.5	0.5
0.0022	222	7.2	6.5	2.5	0.5	7.2	6.5	2.5	0.5	7.2	6.5	2.5	0.5	7.2	6.5	2.5	0.5	7.2	6.5	2.5	0.5	7.2	7.5	3.5	0.5
0.0027	272	7.2	6.5	2.5	0.5	7.2	6.5	2.5	0.5	7.2	6.5	2.5	0.5	7.2	6.5	2.5	0.5	7.2	6.5	2.5	0.5	7.2	7.5	3.5	0.5
0.0033	332	7.2	6.5	2.5	0.5	7.2	6.5	2.5	0.5	7.2	6.5	2.5	0.5	7.2	6.5	2.5	0.5	7.2	7.5	3.5	0.5	7.2	7.5	3.5	0.5
0.0039	392	7.2	6.5	2.5	0.5	7.2	6.5	2.5	0.5	7.2	6.5	2.5	0.5	7.2	6.5	2.5	0.5	7.2	7.5	3.5	0.5	7.2	7.5	3.5	0.5
0.0047	472	7.2	6.5	2.5	0.5	7.2	6.5	2.5	0.5	7.2	6.5	2.5	0.5	7.2	6.5	2.5	0.5	7.2	7.5	3.5	0.5	7.2	9.5	4.5	0.6
0.0056	562	7.2	6.5	2.5	0.5	7.2	6.5	2.5	0.5	7.2	6.5	2.5	0.5	7.2	7.5	3.5	0.5	7.2	7.5	3.5	0.5	7.2	9.5	4.5	0.6
0.0068	682	7.2	6.5	2.5	0.5	7.2	6.5	2.5	0.5	7.2	6.5	2.5	0.5	7.2	7.5	3.5	0.5	7.2	9.5	4.5	0.6	7.2	9.5	4.5	0.6
0.0082	822	7.2	6.5	2.5	0.5	7.2	6.5	2.5	0.5	7.2	6.5	2.5	0.5	7.2	7.5	3.5	0.5	7.2	9.5	4.5	0.6	7.2	9.5	4.5	0.6
0.010	103	7.2	6.5	2.5	0.5	7.2	6.5	2.5	0.5	7.2	6.5	2.5	0.5	7.2	7.5	3.5	0.5	7.2	9.5	4.5	0.6	7.2	10.0	5.0	0.6
0.012	123	7.2	6.5	2.5	0.5	7.2	6.5	2.5	0.5	7.2	6.5	2.5	0.5	7.2	9.5	4.5	0.6	7.2	9.5	4.5	0.6	7.2	11.0	6.0	0.6
0.015	153	7.2	6.5	2.5	0.5	7.2	6.5	2.5	0.5	7.2	6.5	2.5	0.5	7.2	9.5	4.5	0.6	7.2	10.0	5.0	0.6	7.2	11.0	6.0	0.6
0.018	183	7.2	6.5	2.5	0.5	7.2	6.5	2.5	0.5	7.2	6.5	2.5	0.5	7.2	9.5	4.5	0.6	7.2	11.0	6.0	0.6				
0.022	223	7.2	6.5	2.5	0.5	7.2	6.5	2.5	0.5	7.2	7.5	3.5	0.5	7.2	10.0	5.0	0.6	7.2	11.0	6.0	0.6				
0.027	273	7.2	6.5	2.5	0.5	7.2	6.5	2.5	0.5	7.2	7.5	3.5	0.5	7.2	11.0	6.0	0.6	7.2	11.0	6.0	0.6				
0.033	333	7.2	6.5	2.5	0.5	7.2	6.5	2.5	0.5	7.2	7.5	3.5	0.5	7.2	11.0	6.0	0.6								
0.039	393	7.2	6.5	2.5	0.5	7.2	6.5	2.5	0.5	7.2	7.5	3.5	0.5	7.2	11.0	6.0	0.6								
0.047	473	7.2	6.5	2.5	0.5	7.2	6.5	2.5	0.5	7.2	9.5	4.5	0.6	7.2	11.0	6.0	0.6								
0.056	563	7.2	6.5	2.5	0.5	7.2	6.5	2.5	0.5	7.2	9.5	4.5	0.6												
0.068	683	7.2	6.5	2.5	0.5	7.2	6.5	2.5	0.5	7.2	9.5	4.5	0.6												
0.082	823	7.2	6.5	2.5	0.5	7.2	6.5	2.5	0.5	7.2	10.0	5.0	0.6												
0.10	104	7.2	6.5	2.5	0.5	7.2	7.5	3.5	0.5	7.2	10.0	5.0	0.6												
0.12	124	7.2	6.5	2.5	0.5	7.2	9.5	4.5	0.5	7.2	11.0	6.0	0.6												
0.15	154	7.2	7.5	3.5	0.5	7.2	9.5	4.5	0.6	7.2	11.0	6.0	0.6												
0.18	184	7.2	7.5	3.5	0.5	7.2	9.5	4.5	0.6																
0.22	224	7.2	7.5	3.5	0.5	7.2	10.0	5.0	0.6																
0.27	274	7.2	9.5	4.5	0.6	7.2	10.0	5.0	0.6																
0.33	334	7.2	9.5	4.5	0.6	7.2	11.0	6.0	0.6																
0.39	394	7.2	9.5	4.5	0.6	7.2	11.0	6.0	0.6																
0.47	474	7.2	10.0	5.0	0.6	7.2	11.0	6.0	0.6																
0.56	564	7.2	10.0	5.0	0.6	7.2	11.0	6.0	0.6																
0.68	684	7.2	11.0	6.0	0.6																				
0.82	824	7.2	11.0	6.0	0.6																				
1.00	105	7.2	11.0	6.0	0.6																				