

## Radial Lead Type

Series: MG Type : A

- Features
  - Endurance: +85°C 2000 h
  - High Ripple (High Frequency)
  - Include Low Profile products

Japan  
Malaysia  
China



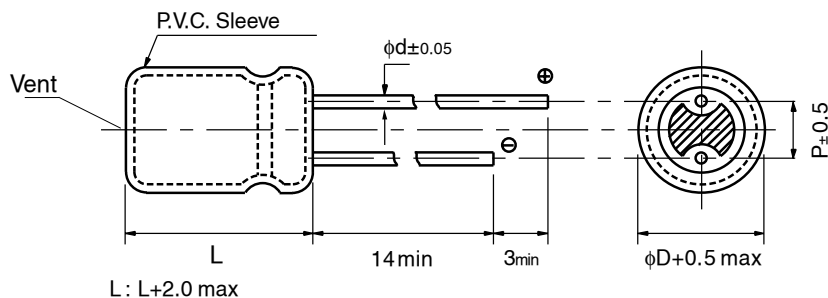
### ■ Specifications

Category temp. range	-25 to +85°C						
Rated W.V. Range	160 to 450 V .DC						
Nominal Cap. Range	2.2 to 470 μ F						
Capacitance Tolerance	±20 % (120Hz/+20°C)						
DC Leakage Current	$I \leq 0.06 CV + 10(\mu A)$ after 2 minutes application of rated working voltage at +20°C						
Dissipation Factor	Please see the attached standard products list.						
Characteristics at Low Temperature	W.V. (V)	160	200	250	350	400	450
	Z(-25°C)/Z(+20°C)	3	3	3	6	6	6
Endurance	(Impedance ratio at 120Hz)						
	After 2000 hours application of DC voltage with specified ripple current ( $\leq$ rated DC working voltage) at +85°C, The capacitor shall meet the following limits.						
	Capacitance change	± 20% of initial measured value					
	tan δ	$\leq 200$ % of initial specified value					
Shelf Life	DC leakage current	$\leq$ initial specified value					
	After storage for 1000 hours at +85±2 °C with no voltage applied and then being stabilized at +20 °C, capacitors shall meet the limits specified in Endurance.(With voltage treatment)						

### ■ Frequency correction factor for ripple current

W.V. (V.DC)	Frequency (Hz)			
	120	1k	10k to 30k	30k to 100k
160 to 250V	0.65	0.85	0.90	1.00
350 to 450V	0.55	0.80	0.90	1.00

### ■ Dimensions in mm (not to scale)



Body Dia. φD	10	12.5	16	18
Lead Dia. φd	0.6	0.6	0.8	0.8
Lead space P	5	5	7.5	7.5

## ■ Standard Products

W.V. (V)	Cap. (±20%) (μF)	Case size		Specification		Lead Length			Part No.	Min. Packaging Qty	
		Dia. (mm)	Length (mm)	Ripple current (100kHz) (+85°C) (mA)	tan δ (120Hz) (+20°C)	Lead Dia. (mm)	Lead Space			Straight Leads (pcs)	Taping (pcs)
							Straight (mm)	Taping *B (mm)			
160	10	10	12.5	280	0.15	0.6	5.0	5.0	EEUMG2C100( )	200	500
	22	10	16	350	0.15	0.6	5.0	5.0	EEUMG2C220( )	200	500
	33	10	20	470	0.15	0.6	5.0	5.0	EEUMG2C330( )	200	500
	47	12.5	20	600	0.15	0.6	5.0	5.0	EEUMG2C470( )	200	500
	68	12.5	20	650	0.15	0.6	5.0	5.0	EEUMG2C680( )	200	500
		100	16	20	750	0.15	0.8	7.5	7.5	EEUMG2C101S( )	100
	150	12.5	25	750	0.15	0.6	5.0	5.0	EEUMG2C101( )	200	500
		18	20	1060	0.15	0.8	7.5	7.5	EEUMG2C151S( )	100	250
	220	16	25	1060	0.15	0.8	7.5	7.5	EEUMG2C151( )	100	250
		18	25	1280	0.15	0.8	7.5	7.5	EEUMG2C221S( )	100	250
	330	18	31.5	1280	0.15	0.8	7.5		EEUMG2C221	100	
470	18	31.5	1690	0.15	0.8	7.5		EEUMG2C331	50		
200	10	10	12.5	280	0.15	0.6	5.0	5.0	EEUMG2D100( )	200	500
	22	10	20	470	0.15	0.6	5.0	5.0	EEUMG2D220( )	200	500
	33	10	20	470	0.15	0.6	5.0	5.0	EEUMG2D330( )	200	500
	47	12.5	20	600	0.15	0.6	5.0	5.0	EEUMG2D470( )	200	500
	68	16	20	750	0.15	0.8	7.5	7.5	EEUMG2D680S( )	100	250
		12.5	25	750	0.15	0.6	5.0	5.0	EEUMG2D680( )	200	500
	100	18	20	1060	0.15	0.8	7.5	7.5	EEUMG2D101S( )	100	250
		16	25	1060	0.15	0.8	7.5	7.5	EEUMG2D101( )	100	250
	150	18	25	1280	0.15	0.8	7.5	7.5	EEUMG2D151S( )	100	250
		16	31.5	1280	0.15	0.8	7.5		EEUMG2D151	100	
	220	18	31.5	1690	0.15	0.8	7.5		EEUMG2D221	50	
330	18	40	2300	0.15	0.8	7.5		EEUMG2D331	50		
250	10	10	16	310	0.15	0.6	5.0	5.0	EEUMG2E100( )	200	500
	22	10	20	430	0.15	0.6	5.0	5.0	EEUMG2E220( )	200	500
	33	12.5	20	560	0.15	0.6	5.0	5.0	EEUMG2E330( )	200	500
	47	16	20	710	0.15	0.8	7.5	7.5	EEUMG2E470S( )	100	250
		12.5	25	710	0.15	0.6	5.0	5.0	EEUMG2E470( )	200	500
	68	18	20	990	0.15	0.8	7.5	7.5	EEUMG2E680S( )	100	250
		16	25	990	0.15	0.8	7.5	7.5	EEUMG2E680( )	100	250
	100	18	25	1200	0.15	0.8	7.5	7.5	EEUMG2E101S( )	100	250
		16	31.5	1200	0.15	0.8	7.5		EEUMG2E101	100	
	150	18	31.5	1470	0.15	0.8	7.5		EEUMG2E151	50	
	220	18	40	2000	0.15	0.8	7.5		EEUMG2E221	50	
350	4.7	10	12.5	150	0.20	0.6	5.0	5.0	EEUMG2V4R7( )	200	500
	6.8	10	16	190	0.20	0.6	5.0	5.0	EEUMG2V6R8( )	200	500
	10	10	20	270	0.20	0.6	5.0	5.0	EEUMG2V100( )	200	500
	22	12.5	20	350	0.20	0.6	5.0	5.0	EEUMG2V220( )	200	500
	33	16	20	480	0.20	0.8	7.5	7.5	EEUMG2V330S( )	100	250
	47	18	20	640	0.20	0.8	7.5	7.5	EEUMG2V470S( )	100	250

When requesting taped product, please put the letter "B" between the "( )". Lead wire pitch B=5mm, 7.5mm.  
The taping dimensions are explained on p.25 of our Catalog. Please use it as a reference guide.  
Endurance : 85°C 2000h

Design, and specifications are each subject to change without notice. Ask factory for the current technical specifications before purchase and / or use. Should a safety concern arise regarding this product, please be sure to contact us immediately.

■ Standard Products

W.V. (V)	Cap. (±20%) (μF)	Case size		Specification		Lead Length			Part No.	Min. Packaging Qty	
		Dia.	Length	Ripple current (100kHz) (+85°C) (mA)	tan δ (120Hz) (+20°C)	Lead Dia.	Lead Space			Straight Leads (pcs)	Taping (pcs)
							Straight (mm)	Taping *B			
350	47	16	25	640	0.20	0.8	7.5	7.5	EEUMG2V470( )	100	250
	68	18	25	780	0.20	0.8	7.5	7.5	EEUMG2V680S( )	100	250
		16	31.5	780	0.20	0.8	7.5		EEUMG2V680	100	
	100	18	31.5	970	0.20	0.8	7.5		EEUMG2V101	50	
400	3.3	10	12.5	130	0.24	0.6	5.0	5.0	EEUMG2G3R3( )	200	500
	4.7	10	16	170	0.24	0.6	5.0	5.0	EEUMG2G4R7( )	200	500
	6.8	10	20	250	0.24	0.6	5.0	5.0	EEUMG2G6R8( )	200	500
	10	10	20	250	0.24	0.6	5.0	5.0	EEUMG2G100( )	200	500
	22	16	20	410	0.24	0.8	7.5	7.5	EEUMG2G220S( )	100	250
		12.5	25	410	0.24	0.6	5.0	5.0	EEUMG2G220( )	200	500
	33	18	20	600	0.24	0.8	7.5	7.5	EEUMG2G330S( )	100	250
		16	25	600	0.24	0.8	7.5	7.5	EEUMG2G330( )	100	250
	47	18	25	730	0.24	0.8	7.5	7.5	EEUMG2G470S( )	100	250
		16	31.5	730	0.24	0.8	7.5		EEUMG2G470	100	
68	18	31.5	910	0.24	0.8	7.5		EEUMG2G680	50		
100	18	40	1240	0.24	0.8	7.5		EEUMG2G101	50		
450	2.2	10	12.5	120	0.24	0.6	5.0	5.0	EEUMG2W2R2( )	200	500
	3.3	10	16	160	0.24	0.6	5.0	5.0	EEUMG2W3R3( )	200	500
	4.7	10	20	230	0.24	0.6	5.0	5.0	EEUMG2W4R7( )	200	500
	6.8	12.5	20	310	0.24	0.6	5.0	5.0	EEUMG2W6R8( )	200	500
	10	12.5	20	310	0.24	0.6	5.0	5.0	EEUMG2W100( )	200	500
	22	18	20	560	0.24	0.8	7.5	7.5	EEUMG2W220S( )	100	250
		16	25	560	0.24	0.8	7.5	7.5	EEUMG2W220( )	100	250
	33	18	25	680	0.24	0.8	7.5	7.5	EEUMG2W330S( )	100	250
		16	31.5	680	0.24	0.8	7.5		EEUMG2W330	100	
	47	18	31.5	850	0.24	0.8	7.5		EEUMG2W470	50	
68	18	40	1150	0.24	0.8	7.5		EEUMG2W680	50		

When requesting taped product, please put the letter "B" between the "( )". Lead wire pitch B=5mm, 7.5mm. The taping dimensions are explained on p.25 of our Catalog. Please use it as a reference guide.  
Endurance : 85°C 2000h