HMG Series

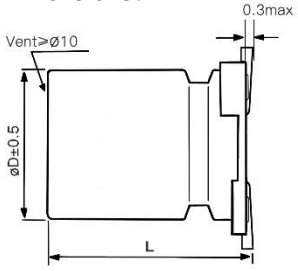
Features

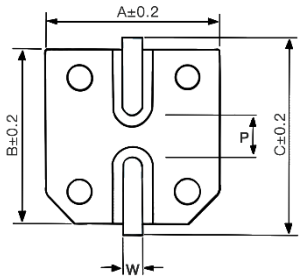
- φ8 ~ φ10, 135℃, 4000 hours assured
- Low ESR and high ripple current
- Designed for reflow soldering
- Vibration resistant structure
- RoHS 2.0 compliant, 247 SVHC & REACH compliant
- AEC-Q200 compliant, Please contact Jarson for more details, test data, information

Marking color: Black

Specifications						
Category temp. range	−55℃ to +135℃					
Capacitance tolerance	±20% (120 Hz / +20 ℃)					
Leakage current	I ≦ 0.01 CV or 3 μA whichever is greater (after 2 minutes)					
Tan δ	Please see the attached characteristics list					
Characteristics at low temperature	Rated voltage (V)	25	35	50	63	Impedance ratio at 120 Hz
	Z (-25 ℃) / Z (+20 ℃)	2.0	2.0	2.0	2.0	
	Z (-55 ℃) / Z (+20 ℃)	2.5	2.5	2.5	2.5	
Endurance	After applying rated working voltage and rated ripple current for 4000 hours at +135 ℃/+125 ℃ ± 2 ℃, and then being stabilized at +20 ℃, capacitors shall meet the following limits.					
	Capacitance change	Within ±30% of the initial value				
	Dissipation factor (tan δ)	Less than 200% of the initial value				
	ESR	Less than 200% of the initial value				
	Leakage current	Within the initial limit				
Shelf life	After storage for 1000 h at +135 ℃ ± 2 ℃ with no voltage applied and then being stabilized at +20 ℃, capacitors shall meet the limits specified in endurance.					
Resistance to soldering heat	After reflow soldering and then being stabilized at +20 ℃, capacitors shall meet the following limits.					
	Capacitance change	Within ±10% of the initial value				
	Dissipation factor (tan δ)	Within the initial limit				
	ESR	Within the initial limit				
	Leakage current	Within the initial limit				
Frequency correction factor for ripple current	Frequency	120≤ f < 1k	1k≤ f < 10k	10k≤ f < 100k	100k≤ f < 500k	
	Correction Factor	0.1	0.3	0.6	1.0	

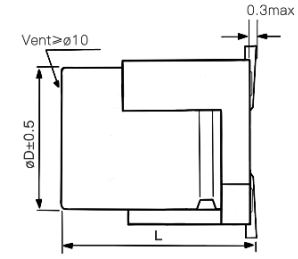
Dimensions:

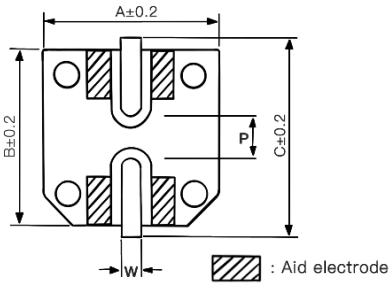




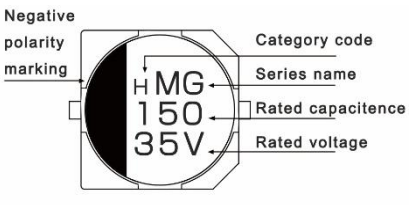
Dimensions						Unit: mm
φD	L	A	B	C	W	P±0.2
8	10±0.5	8.3	8.3	9.1	0.7~1.3	3.1
10	10.5±0.5	10.3	10.3	11.1	0.7~1.3	4.4
10	12.5±0.5	10.3	10.3	11.1	0.7~1.3	4.4
10	16.5±0.5	10.3	10.3	11.1	0.7~1.3	4.4

Vibration resistant structure:





Marking:



Part Number System:

Conductive Polymer Hybrid Capacitors	HMG series	25V	220μF	±20 %	8 φ x10L
H	**MG**	**1E**	**221**	**M**	**0810**
Product category	Series name	Rated voltage	Capacitance	Capacitance tolerance	Case Size

Characteristics list

Rated voltage (V)	Capacitance (±20%) (μF)	Case size		Specification				Part Number④	Taping&Reel
		øD (mm)	L (mm)	Rated ripple current① (mA rms)		ESR② (mΩ)	tan δ③		MPQ (pcs/reel)
				Endurance1 (+135℃)	Endurance2 (+145℃)				
25	220	8	10	2900	1600	27	0.14	HMG1E221M0810	500
	330	10	10.5	3300	2000	20	0.14	HMG1E331M1010	500
	470	10	12.5	3500	2300	16	0.14	HMG1E471M1013	400
	560	10	16.5	4000	2900	11	0.14	HMG1E561M1016	250
35	150	8	10	2900	1600	27	0.12	HMG1V151M0810	500
	220	10	10.5	3300	2000	20	0.12	HMG1V221M1010	500
	270	10	10.5	3300	2000	20	0.12	HMG1V271M1010	500
	330	10	12.5	3500	2300	16	0.12	HMG1V331M1013	400
	470	10	16.5	4000	2900	11	0.12	HMG1V471M1016	250
50	33	8	10	2200	1250	30	0.10	HMG1H330M0810	500
	47	8	10	2200	1250	30	0.10	HMG1H470M0810	500
	68	8	10	2200	1250	30	0.10	HMG1H680M0810	500
	100	10	10.5	2600	1600	28	0.10	HMG1H101M1010	500
	120	10	10.5	2600	1600	28	0.10	HMG1H121M1010	500
	150	10	12.5	3200	2000	18	0.10	HMG1H151M1013	400
	220	10	16.5	3700	2600	13	0.10	HMG1H221M1016	250
63	22	8	10	1900	1100	40	0.08	HMG1J220M0810	500
	33	8	10	1900	1100	40	0.08	HMG1J330M0810	500
	47	8	10	1900	1100	40	0.08	HMG1J470M0810	500
	56	10	10.5	2300	1400	30	0.08	HMG1J560M1010	500
	68	10	10.5	2300	1400	30	0.08	HMG1J680M1010	500
	82	10	10.5	2300	1400	30	0.08	HMG1J820M1010	500
	100	10	12.5	3000	1900	20	0.08	HMG1J101M1013	400
	150	10	16.5	3500	2400	15	0.08	HMG1J151M1016	250

① Rated ripple current (100kHz / +135℃) ② ESR (100kHz / +20℃) ③ tan δ (120Hz / +20℃)

④ For Vibration resistant structure, the Part Number is appended with "v" at the end.

※Please refer to the page of reflow conditions for reflow profile.