

## **HMR Series**

## **Features**

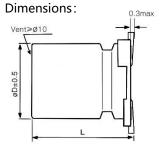
- · Low ESR and high ripple current
- · Designed for reflow soldering
- Vibration resistant structure
- RoHS 2.0 compliant, 247 SVHC & REACH compliant
- AEC-Q200 compliant, Please contact Jarson for more details, test data, information

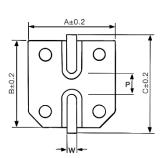




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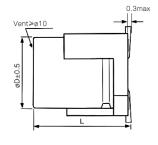
Specifications										
Category temp. range	−55°C to +125°C									
Capacitance tolerance	±20% (120 Hz / +20 ℃)									
Leakage current	$I \le 0.01$ CV or 3 $\mu A$ whichever is greater (after 2 minutes)									
Tan δ	Please see the attached characteristics list									
Characteristics at low	Rated voltage (V)	16	25	35	50	63	80			
	Z(-25°C)/Z(+20°C)	2.0	2.0	2.0	2.0	2.0	2.0	Impedance ratio at 120 Hz		
temperature	Z (-55 °C) / Z (+20 °C)	2.5	2.5	2.5	2.5	2.5	2.5	at 120 112		
	After applying rated working voltage and rated ripple current for 4000 hours at +125 $^{\circ}$ C $\pm$ 2 $^{\circ}$ C, and then being									
	stabilized at +20 °C, capacitors shall meet the following limits.									
Endurance	Capacitance change Within ±30% of the initial value									
Endurance	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									
el lene	After storage for 1000 h at +125 $^{\circ}$ C $\pm$ 2 $^{\circ}$ C with no voltage applied and then being stabilized at +20 $^{\circ}$ C,									
Shelf life	capacitors shall meet the limits specified in endurance.									
	After reflow soldering and then being stabilized at +20 °C, capacitors shall meet the following limits.									
Decistance to	Capacitance change Within ±10% of the initial value									
Resistance to soldering heat	Dissipation factor (tan $\delta$ )	tion factor (tan δ) Within the initial limit								
	ESR	Within the initial limit								
	Leakage current	Within the initial limit								
Frequency correction	Frequency	120≤ f<1k 1k≤ f<10k 10k≤ f<100k 100				100k≤ f<500k				
factor for ripple current	Correction Factor	C	).1	0	).3		0.6	1.0		

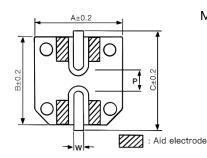




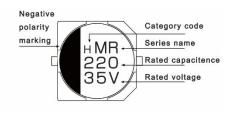
Dimensions Unit: mm									
φD	L	Α	В	С	W	P±0.2			
6.3	6±0.5	6.6	6.6	7.3	0.5~0.8	2.0			
6.3	7.7±0.5	6.6	6.6	7.3	0.5~0.8	2.0			
8	6.5±0.5	8.3	8.3	9.1	0.7~1.3	3.1			
8	10±0.5	8.3	8.3	9.1	0.7~1.3	3.1			
10	10.5±0.5	10.3	10.3	11.1	0.7~1.3	4.4			
10	12.5±0.5	10.3	10.3	11.1	0.7~1.3	4.4			

## Vibration resistant structure:





## Marking:





Part Number System:

Conductive Polymer  $HMR\ series \qquad 35V \qquad \qquad 100 \mu F \qquad \qquad \pm 20\ \% \qquad \qquad 6.3\ \varphi\ x7.7L$  Hybrid Capacitors

<u>H</u> <u>MR</u> <u>1V</u> <u>101</u> <u>M</u> <u>0607</u>

Product category Series name Rated voltage Capacitance Capacitance tolerance Case Size

Characteristics list										
Rated	Capacitance	Case size		Sp	ecification			Taping&Reel		
voltage (V)	(±20%) (μF)	øD (mm)	L (mm)	Rated ripple current① (mA rms)	Imp.② (Ω)	tan δ③	Part Number④	MPQ (pcs/reel)		
	82	6.3	6	900	50	0.16	HMR1C820M0606	1000		
	100	6.3	6	900	50	0.16	HMR1C101M0606	1000		
	150	6.3	7.7	1400	30	0.16	HMR1C151M0607	1000		
	220	6.3	7.7	1400	30	0.16	HMR1C221M0607	1000		
16	270	8	10	1600	27	0.16	HMR1C271M0810	500		
16	470	10	10.5	2000	20	0.16	HMR1C471M1010	500		
	560	10	10.5	2000	20	0.16	HMR1C561M1010	500		
	560	10	12.5	2550	18	0.16	HMR1C561M1013	400		
	020	10	10.5	2000	20	0.16	HMR1C821M1010	500		
	820	10	12.5	2800	18	0.16	HMR1C821M1013	400		
	33	6.3	6	900	50	0.14	HMR1E330M0606	1000		
	47	6.3	6	900	50	0.14	HMR1E470M0606	1000		
	56	6.3	6	900	50	0.14	HMR1E560M0606	1000		
	68	6.3	6	900	50	0.14	HMR1E680M0606	1000		
		6.3	7.7	1400	30	0.14	HMR1E680M0607	1000		
	100	6.3	7.7	1400	30	0.14	HMR1E101M0607	1000		
25	150	6.3	7.7	1400	30	0.14	HMR1E151M0607	1000		
25		8	10	1600	27	0.14	HMR1E151M0810	500		
	220	8	10	1600	27	0.14	HMR1E221M0810	500		
	270	8	10	1600	27	0.14	HMR1E271M0810	500		
	330	8	10	1600	27	0.14	HMR1E331M0810	500		
		10	10.5	2000	20	0.14	HMR1E331M1010	500		
	470	10	10.5	2000	20	0.14	HMR1E471M1010	500		
	680	10	12.5	2800	15	0.14	HMR1E681M1013	400		
	33	6.3	6	900	60	0.12	HMR1V330M0606	1000		
	47	6.3	6	900	60	0.12	HMR1V470M0606	1000		
35	68	6.3	7.7	1400	35	0.12	HMR1V680M0607	1000		
	100	6.3	7.7	1400	35	0.12	HMR1V101M0607	1000		
		8	6.5	1400	35	0.12	HMR1V101M0806	1000		
		8	10	1600	27	0.12	HMR1V101M0810	500		
	150	8	10	1600	27	0.12	HMR1V151M0810	500		
	180	8	10	1600	27	0.12	HMR1V181M0810	500		
	220	10	10.5	2000	20	0.12	HMR1V221M1010	500		
	270	10	10.5	2000	20	0.12	HMR1V271M1010	500		
	330	10	10.5	2000	20	0.12	HMR1V331M1010	500		
	470	10	12.5	2800	16	0.12	HMR1V471M1013	400		

① Rated ripple current (100kHz / +125°C) ② ESR (100kHz / +20°C) ③  $\tan \delta$  (120Hz / +20°C)

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

<sup>\*\*</sup>Please refer to the page of reflow conditions for reflow profile.



Characteris	tics list							
Rated	Capacitance	Case size		Sp	ecification			Taping&Ree
voltage (V)	(±20%) (μF)	øD (mm)	L (mm)	Rated ripple current① (mA rms)	Imp.② (Ω)	tan δ③	Part Number④	MPQ (pcs/reel)
	22	6.3	6	750	80	0.10	HMR1H220M0606	1000
	33	6.3	7.7	1100	40	0.10	HMR1H330M0607	1000
	47	8	10	1250	30	0.10	HMR1H470M0810	500
	68	8	10	1250	30	0.10	HMR1H680M0810	500
50	100	8	10	1250	30	0.10	HMR1H101M0810	500
		10	10.5	1600	28	0.10	HMR1H101M1010	500
	120	10	10.5	1600	28	0.10	HMR1H121M1010	500
	150	10	10.5	1600	28	0.10	HMR1H151M1010	500
	220	10	12.5	1800	23	0.10	HMR1H221M1013	400
	10	6.3	6	700	120	0.08	HMR1J100M0606	1000
	22	6.3	7.7	900	80	0.08	HMR1J220M0607	1000
	33	8	10	1100	40	0.08	HMR1J330M0810	500
63	47	8	10	1100	40	0.08	HMR1J470M0810	500
	56	10	10.5	1400	30	0.08	HMR1J560M1010	500
	68	10	10.5	1400	30	0.08	HMR1J680M1010	500
	82	10	10.5	1400	30	0.08	HMR1J820M1010	500
	100	10	10.5	1400	30	0.08	HMR1J101M1010	500
	120	10	12.5	1600	26	0.08	HMR1J121M1013	400
	22	8	10	1050	45	0.08	HMR1K220M0810	500
80	33	8	10	1050	45	0.08	HMR1K330M0810	500
		10	10.5	1350	36	0.08	HMR1K330M1010	500
	47	10	10.5	1350	36	0.08	HMR1K470M1010	500
	56	10	12.5	1550	32	0.08	HMR1K560M1013	400

① Rated ripple current (100kHz / +105°C) ② ESR (100kHz / +20°C) ③  $\tan \delta$  (120Hz / +20°C)

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

 $<sup>\</sup>ensuremath{\mathbb{X}}\xspace$  Please refer to the page of reflow conditions for reflow profile.