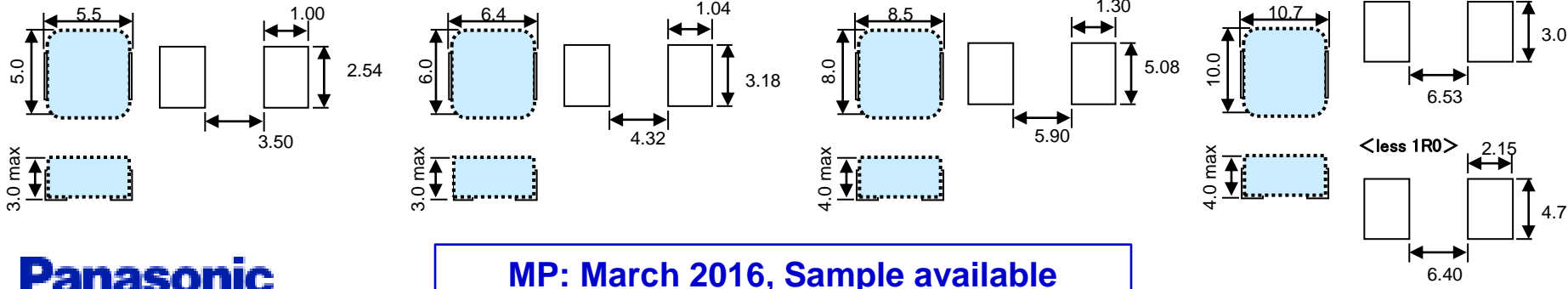


# Panasonic LP(Low Profile) series Design idea(Tentative data)

PANASONIC PN	PANASONIC				
	Size [mm]	L [uH]	DCR	Rated current $\Delta t$ (40k)	Isat -20%
ETQP3M100KVP	5.5 x 5.0 x 3.0	10	96.0	2.9	2.5
ETQP3M6R8KVP	5.5 x 5.0 x 3.0	6.8	69.7	3.3	3.8
ETQP3M4R7KVP	5.5 x 5.0 x 3.0	4.7	45.6	4.1	4.1
ETQP3M3R3KVP	5.5 x 5.0 x 3.0	3.3	26.3	5.4	5.7
ETQP3M2R2KVP	5.5 x 5.0 x 3.0	2.2	21.2	6.0	6.5
ETQP3M1R5KVP	5.5 x 5.0 x 3.0	1.5	12.3	7.9	8.0
ETQP3M1R0KVP	5.5 x 5.0 x 3.0	1	9.6	9.0	8.8
ETQP3MR68KVP	5.5 x 5.0 x 3.0	0.68	7.6	10.1	11.8
ETQP3M220KVN	6.4 x 6.0 x 3.0	22	128.0	2.7	2.8
ETQP3M150KVN	6.4 x 6.0 x 3.0	15	99.2	3.0	3.1
ETQP3M100KVN	6.4 x 6.0 x 3.0	10	67.0	3.7	3.5
ETQP3M6R8KVN	6.4 x 6.0 x 3.0	6.8	44.6	4.5	4.5
ETQP3M4R7KVN	6.4 x 6.0 x 3.0	4.7	30.0	5.5	5.5
ETQP3M3R3KVN	6.4 x 6.0 x 3.0	3.3	24.1	6.1	6.5
ETQP3M2R2KVN	6.4 x 6.0 x 3.0	2.2	14.5	7.9	7.2
ETQP3M1R5KVN	6.4 x 6.0 x 3.0	1.5	11.3	9.0	9.5
ETQP3M1R0KVN	6.4 x 6.0 x 3.0	1	7.6	10.9	12.0
ETQP3MR68KVN	6.4 x 6.0 x 3.0	0.68	5.2	13.2	14.0

PANASONIC PN	PANASONIC				
	Size [mm]	L [uH]	DCR	Rated current $\Delta t$ (40k)	Isat -20%
ETQP4M330KVK	8.5 x 8.0 x 4.0	33	125.5	3.2	2.8
ETQP4M220KVK	8.5 x 8.0 x 4.0	22	78.4	4.1	3.2
ETQP4M150KVK	8.5 x 8.0 x 4.0	15	59.0	4.7	4.0
ETQP4M100KVK	8.5 x 8.0 x 4.0	10	41.6	5.6	5.0
ETQP4M6R8KVK	8.5 x 8.0 x 4.0	6.8	24.5	7.3	5.3
ETQP4M4R7KVK	8.5 x 8.0 x 4.0	4.7	16.1	9.0	5.8
ETQP4M3R3KVK	8.5 x 8.0 x 4.0	3.3	14.0	9.6	10.0
ETQP4M2R2KVK	8.5 x 8.0 x 4.0	2.2	8.5	12.3	11.1
ETQP4M1R5KVK	8.5 x 8.0 x 4.0	1.5	6.9	13.7	11.5
ETQP4M1R0KVK	8.5 x 8.0 x 4.0	1	3.7	18.7	12.0
ETQP4MR68KVK	8.5 x 8.0 x 4.0	0.68	2.9	21.0	14.0
ETQP4M470KVC	10.7 x 10.0 x 4.0	47	132.0	3.1	3.2
ETQP4M330KVC	10.7 x 10.0 x 4.0	33	85.4	3.9	3.8
ETQP4M220KVC	10.7 x 10.0 x 4.0	22	58.9	4.7	4.4
ETQP4M150KVC	10.7 x 10.0 x 4.0	15	39.5	5.7	4.9
ETQP4M100KVC	10.7 x 10.0 x 4.0	10	25.6	7.1	5.9
ETQP4M6R8KVC	10.7 x 10.0 x 4.0	6.8	17.5	8.6	7.1
ETQP4M4R7KVC	10.7 x 10.0 x 4.0	4.7	12.0	10.4	7.5
ETQP4M3R3KVC	10.7 x 10.0 x 4.0	3.3	9.5	11.7	9.5
ETQP4M2R2KVC	10.7 x 10.0 x 4.0	2.2	7.1	13.5	11.1
ETQP4M1R5KVC	10.7 x 10.0 x 4.0	1.5	5.1	15.9	13.0
ETQP4M1R0KVC	10.7 x 10.0 x 4.0	1	2.8	21.5	16.8

IDC1: Direct current based on the L 10% down from the initial value (without step L down before/after this value because of using Metal composite core)  
 Operating temperature: up to 150deg.C (including self-temperature rise)



**MP: March 2016, Sample available**

# Panasonic LP(Low Profile) series Vishay comparison

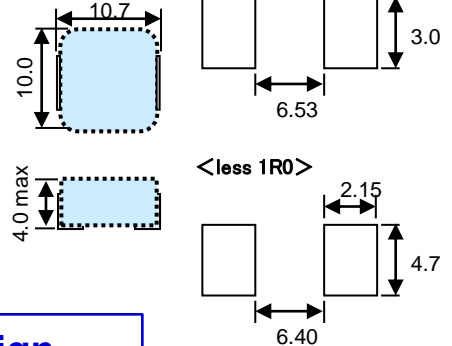
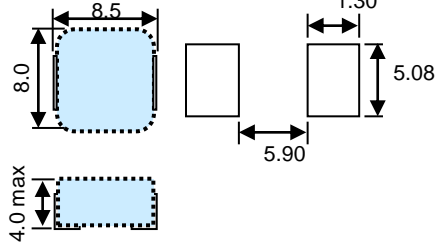
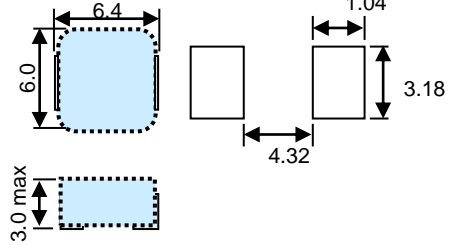
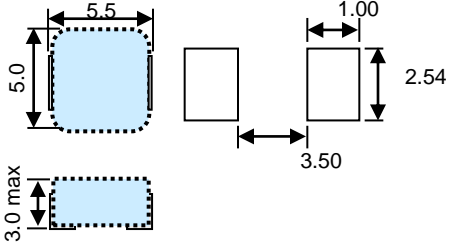
□5 size 5.5 x 5.0 x 3.0						
L [uH]	Panasonic ETQP3M□□□KVP			Vishay IHLP-2020CZ-5A		
	DCR	Rated current Δt (40k)	Isat -20%	DCR	Rated current Δt (40k)	Isat -20%
47	-	-	-	-	-	-
33	-	-	-	-	-	-
22	-	-	-	-	-	-
15	-	-	-	-	-	-
10	96.0	2.9	2.5	132	2.8	1.6
6.8	69.7	3.3	3.8	104	3.2	2.2
4.7	45.6	4.1	4.1	72.8	4.1	3.7
3.3	26.3	5.4	5.7	44.0	5.3	5.5
2.2	21.2	6.0	6.5	24.7	6.6	6.3
1.5	12.3	7.9	8.0	18.0	7.9	7.1
1.0	9.6	9.0	8.8	11.5	10.8	8.0
0.68	7.6	10.1	11.8	9.1	11.3	8.2

□6 size 6.4 x 6.0 x 3.0						
L [u]	Panasonic ETQP3M□□□KVN			Vishay IHLP-2525CZ-5A		
	DCR	Rated current Δt (40k)	Isat -20%	DCR	Rated current Δt (40k)	Isat -20%
47	-	-	-	-	-	-
33	-	-	-	-	-	-
22	128	2.7	2.8	163.0	2.8	2.2
15	99.2	3.0	3.1	118.0	2.9	2.8
10	67.0	3.7	3.5	71.9	4.0	2.9
6.8	44.6	4.5	4.5	53.8	4.4	4.4
4.7	30.0	5.5	5.5	35.9	5.6	5.6
3.3	24.1	6.1	6.5	26.5	6.8	8.3
2.2	14.5	7.9	7.2	17.1	8.1	10.8
1.5	11.3	9.0	9.5	-	-	-
1.0	7.6	10.9	12.0	7.90	12.0	13.0
0.68	5.2	13.2	14.0	5.38	16.5	17.0

□8 size 8.5 x 8.0 x 4.0						
L [u]	Panasonic ETQP4M□□□KVK			Vishay IHLP-3232DZ-5A		
	DCR	Rated current Δt (40k)	Isat -20%	DCR	Rated current Δt (40k)	Isat -20%
47	-	-	-	-	-	-
33	125.5	3.2	2.8	149	3.1	3.2
22	78.4	4.1	3.2	103	3.7	3.8
15	59.0	4.7	4.0	62.0	4.1	3.6
10	41.6	5.6	5.0	50.0	5.1	5.2
6.8	24.5	7.3	5.3	-	-	-
4.7	16.1	9.0	5.8	26.6	9.1	9.1
3.3	14.0	9.6	10.0	15.4	9.8	11.8
2.2	8.5	12.3	11.1	11.7	11.0	14.0
1.5	6.9	13.7	11.5	-	-	-
1.0	3.7	18.7	12.0	4.58	19.0	16.2
0.68	2.92	21.0	14.0	3.30	21.5	16.2

□10 size 10.7 x 10.0 x 4.0						
L [u]	Panasonic ETQP4M□□□KVC			Vishay IHLP-4040DZ-5A		
	DCR	Rated current Δt (40k)	Isat -20%	DCR	Rated current Δt (40k)	Isat -20%
47	132	3.1	3.2	167	2.5	4.5
33	85.4	3.9	3.7	110	3.7	4.2
22	58.9	4.7	4.4	70.5	4.1	6.4
15	39.5	5.7	4.9	47.0	5.1	7.7
10	25.6	7.1	5.9	30.9	6.5	8.5
6.8	17.5	8.6	7.1	20.9	9.1	9.0
4.7	12.0	10.4	7.5	14.3	9.8	9.2
3.3	9.5	11.7	9.5	11.0	11.0	12.0
2.2	7.1	13.5	11.1	8.15	15.0	12.0
1.5	5.1	15.9	-	-	-	-
1.0	2.8	21.5	16.8	2.87	23.5	24.0
0.68	-	-	-	-	-	-

IDC1: Direct current based on the L 10% down from the initial value (without steep L down before/after this value because of using Metal composite core)  
 Operating temperature: up to 150deg.C (including self-temperature rise)



• Vishay IHL terminal and height compatible design