HCY2

Metalized polypropylene film interference suppreission capacitor(Class Y2, 300Va.c.)



Features

- Metallized polypropylene film
- Capable of withstanding over-voltage stress
- Excellent self-healing performance
- UL 94 V-0 compliant
- Automotive (AEC–Q200) grade

Typical Applications

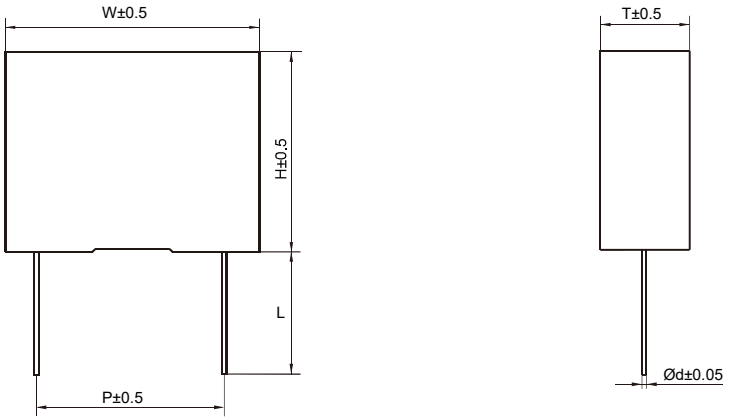
- For use in electromagnetic interference (EMI) suppression in "line-to-ground" applications
  Not suitable for series connection with the mains

Safety Approvals

cqc	CQC	GB/T 6346.14	0.001μF-1.0μF; 300Va.c.;40/110/56/B File No.: CQC24001429840
c UL us	UL/cUL	UL 60384-14 CSAE60384-1 CSA E60384-14	0.001μF-1.0μF; 300Va.c.;40/110/56/B; File No.: E311928
ENEC	ENEC	EN 60384-14 EN 60384-14:A1	0.001μF-1.0μF; 300Va.c.;40/110/56/B; File No.: ENEC-04611-M1

Notes: The above certificate No.is just a license No. Please refer to the certificates we supplied for detail information.

Outline Drawing



Notes: All product dimensions are in mm.
See the Outline Dimensions table for details.

Specifications

Reference standards		IEC 60384-14, GB/T 6346.14				
Rated voltage	U_R	300Va.c. (50Hz/60Hz)				
Permissible DC voltage	U_{DC}	1500Vd.c. $T_{op}\leqslant 85^{\circ}C$ 1.33%/°C derating when $85^{\circ}C<T_{op}\leqslant 110^{\circ}C$				
Capacitance range	C_N	0.001μF~1.0μF				
Capacitance tolerance		±10%(K), ±20%(M)				
Dissipation factor	tanδ	$0.001\mu F\leqslant C_N\leqslant 0.47\mu F$	$\leqslant 30\times10^{-4}$(10kHz,20°C)			
		$0.47\mu F<C_N\leqslant 1.0\mu F$	$\leqslant 40\times10^{-4}$(10kHz,20°C)			
Insulation resistance (20°C,100V,1min)	IR	$C_N\leqslant 0.33\mu F$	IR≥15000MΩ			
		$C_N>0.33\mu F$	$IR\cdot C_N\geqslant 5000s$			
Climatic category/ Passive flammability category		40/110/56/B				
Operating temperature range	T_{OP}	-40°C~+110°C				
Voltage proof	U_{t-t}	Between terminals		$C_N\leqslant 0.33\mu F$	4000Vd.c. or 2000Va.c.(2s)	
				$C_N>0.33\mu F$	3700Vd.c. or 2000Va.c.(2s)	
	U_{t-c}	Between terminals and case		2500Va.c.(1min)		
Pulse handling capability	Lead spacing	10mm	15mm	22.5mm	27.5mm	37.5mm
	dV/dt (V/μs)	800	600	500	400	300
	"dV/dt" represents the maximum permissible voltage change per unit of time for non-sinusoidal voltages, expressed in V/μs.					

Ordering Information

1 2 3 4	5	6 7	8 9 10	11	12	13 14 15	16 17 18 19
H C Y 2	/	Q 1	1 0 4	K	9	0 0 0	C 0 0 0
Series code		**Rated voltage**	**Rated capacitance**	**Capacitance tolerance**	**Pitch**	**Internal code**	**Lead form and packaging code**
		Q1=300Va.c.	For example: 104=10×10⁴pF =0.1μF	K=±10% M=±20%	4=10mm 6=15mm 9=22.5mm B=27.5mm F=37.5mm		See table 1

Table 1: Lead Form and Packaging Code

Digit 16		Digit 17		Digit 18		Digit 19	
Code	Explanation	Code	Explanation	Code	Explanation	Code	Explanation
A	Ammo-pack[1)]	3	F=7.5mm	0	Straight	1	Taping lead space: P_3=12.7mm,H=18.0mm(Pitch=7.5mm)
		4	F=10mm				
		6	F=15mm			5	P_3=25.4mm,H=18.0mm (Pitch=10.0 or 15.0mm)
		7	F=22.5mm	1	Crimped		
		8	F=27.5mm			7	P_3=38mm,H=18.0mm (Pitch=22.5mm or 27.5mm)
C	Straight Lead (bulk)[2)]	00	Standard lead length(18mm ~ 28mm)			0	Standard lead length
		35	Lead length3.5mm[3)]				Lead length tolerance±0.5mm

Notes: 1) For more details on Ammo-pack, please refer to the Overview of the Universal Capacitors.
2) Other lead form and packaging options are available upon customer request.
3) If the lead length is 4.5 mm, the code is C450, etc.

Outline Dimensions

Unit: mm

300Va.c.													
C_N(μF)	W	H	T	P	d	Ordering Information	C_N(μF)	W	H	T	P	d	Ordering Information
0.001	13.0	9.0	4.0	10.0	0.6	HCY2/Q1102+4000****	0.0047	18.0	9.5	5.0	15.0	0.6	HCY2/Q1472+6000****
0.0012	13.0	9.0	4.0	10.0	0.6	HCY2/Q1122+4000****	0.0056	18.0	9.5	5.0	15.0	0.6	HCY2/Q1562+6000****
0.0015	13.0	9.0	4.0	10.0	0.6	HCY2/Q1152+4000****	0.0068	18.0	9.5	5.0	15.0	0.6	HCY2/Q1682+6000****
0.0018	13.0	9.0	4.0	10.0	0.6	HCY2/Q1182+4000****	0.0082	18.0	9.5	5.0	15.0	0.6	HCY2/Q1822+6000****
0.0022	13.0	9.0	4.0	10.0	0.6	HCY2/Q1222+4000****	0.01	18.0	11.0	5.0	15.0	0.6	HCY2/Q1103+6000****
0.0027	13.0	9.0	4.0	10.0	0.6	HCY2/Q1272+4000****	0.012	18.0	11.0	5.0	15.0	0.6	HCY2/Q1123+6000****
0.0033	13.0	9.0	4.0	10.0	0.6	HCY2/Q1332+4000****	0.015	18.0	11.0	5.0	15.0	0.6	HCY2/Q1153+6000****
0.0039	13.0	9.0	4.0	10.0	0.6	HCY2/Q1392+4000****	0.018	18.0	12.0	6.0	15.0	0.6	HCY2/Q1183+6000****
0.0047	13.0	11.0	5.0	10.0	0.6	HCY2/Q1472+4000****	0.022	18.0	12.0	6.0	15.0	0.6	HCY2/Q1223+6000****
0.0056	13.0	11.0	5.0	10.0	0.6	HCY2/Q1562+4000****	0.027	18.0	13.0	7.0	15.0	0.6	HCY2/Q1273+6000****
0.0068	13.0	11.0	5.0	10.0	0.6	HCY2/Q1682+4000****	0.033	18.0	13.5	7.5	15.0	0.8	HCY2/Q1333+6000****
0.0082	13.0	12.0	6.0	10.0	0.6	HCY2/Q1822+4000****	0.039	18.0	14.5	8.5	15.0	0.8	HCY2/Q1393+6000****
0.01	13.0	12.0	6.0	10.0	0.6	HCY2/Q1103+4000****	0.047	18.0	14.5	8.5	15.0	0.8	HCY2/Q1473+6000****
0.015	13.0	14.0	8.0	10.0	0.6	HCY2/Q1153+4000****	0.056	18.0	16.0	10.0	15.0	0.8	HCY2/Q1563+6000****
0.0022	18.0	9.5	5.0	15.0	0.6	HCY2/Q1222+6000****	0.068	18.0	16.0	10.0	15.0	0.8	HCY2/Q1683+6000****
0.0027	18.0	9.5	5.0	15.0	0.6	HCY2/Q1272+6000****	0.082	18.0	19.2	11.2	15.0	0.8	HCY2/Q1823+6000****
0.0033	18.0	9.5	5.0	15.0	0.6	HCY2/Q1332+6000****	0.033	26.5	15.0	6.0	22.5	0.8	HCY2/Q1333+9000****
0.0039	18.0	9.5	5.0	15.0	0.6	HCY2/Q1392+6000****	0.039	26.5	15.0	6.0	22.5	0.8	HCY2/Q1393+9000****

Notes: 1) "+" means capacitance tolerance, K=±10%, M=±20% ;
2)"****" means lead form and packaging code (See table 1) .

Outline Dimensions

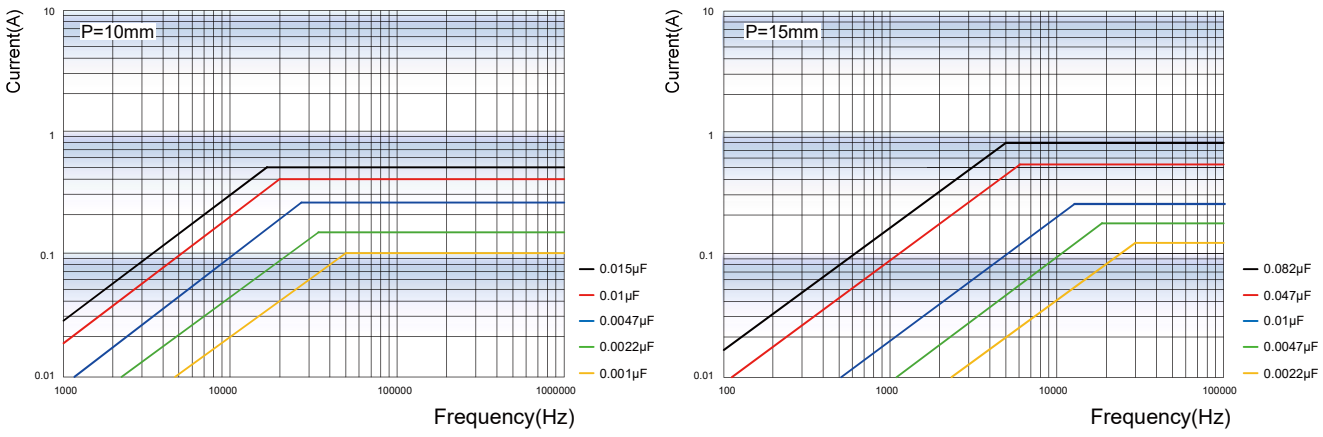
Unit: mm

300Va.c.													
C_N(μF)	W	H	T	P	d	Ordering Information	C_N(μF)	W	H	T	P	d	Ordering Information
0.047	26.5	15.0	6.0	22.5	0.8	HCY2/Q1473+9000****	0.27	32.0	25.0	14.0	27.5	0.8	HCY2/Q1274+B000****
0.056	26.5	16.5	7.0	22.5	0.8	HCY2/Q1563+9000****	0.33	32.0	25.0	14.0	27.5	0.8	HCY2/Q1334+B000****
0.068	26.5	16.5	7.0	22.5	0.8	HCY2/Q1683+9000****	0.39	32.0	28.0	14.0	27.5	0.8	HCY2/Q1394+B000****
0.082	26.5	17.0	8.5	22.5	0.8	HCY2/Q1823+9000****	0.47	32.0	30.0	16.0	27.5	0.8	HCY2/Q1474+B000****
0.1	26.5	17.0	8.5	22.5	0.8	HCY2/Q1104+9000****	0.56	32.0	30.0	16.0	27.5	0.8	HCY2/Q1564+B000****
0.12	26.5	19.0	10.0	22.5	0.8	HCY2/Q1124+9000****	0.68	32.0	33.0	18.0	27.5	0.8	HCY2/Q1684+B000****
0.15	26.5	19.0	10.0	22.5	0.8	HCY2/Q1154+9000****	0.82	32.0	37.0	22.0	27.5	0.8	HCY2/Q1824+B000****
0.18	26.5	22.0	12.0	22.5	0.8	HCY2/Q1184+9000****	1.0	32.0	37.0	22.0	27.5	0.8	HCY2/Q1105+B000****
0.22	26.5	22.0	12.0	22.5	0.8	HCY2/Q1224+9000****	0.33	42.0	22.0	12.0	37.5	1.0	HCY2/Q1334+F000****
0.27	26.5	24.5	15.5	22.5	0.8	HCY2/Q1274+9000****	0.39	42.0	24.0	13.0	37.5	1.0	HCY2/Q1394+F000****
0.33	26.5	29.5	14.5	22.5	0.8	HCY2/Q1334+9000****	0.47	42.0	26.0	15.0	37.5	1.0	HCY2/Q1474+F000****
0.39	26.5	29.5	14.5	22.5	0.8	HCY2/Q1394+9000****	0.56	42.0	26.0	15.0	37.5	1.0	HCY2/Q1564+F000****
0.15	32.0	20.0	11.0	27.5	0.8	HCY2/Q1154+B000****	0.68	42.0	30.0	16.0	37.5	1.0	HCY2/Q1684+F000****
0.18	32.0	20.0	110	27.5	0.8	HCY2/Q1184+B000****	0.82	42.0	30.0	16.0	37.5	1.0	HCY2/Q1824+F000****
0.22	32.0	20.0	11.0	27.5	0.8	HCY2/Q1224+B000****	1.0	42.0	33.0	18.0	37.5	1.0	HCY2/Q1105+F000****

Notes: 1) "+" means capacitance tolerance, K=±10%, M=±20% ;
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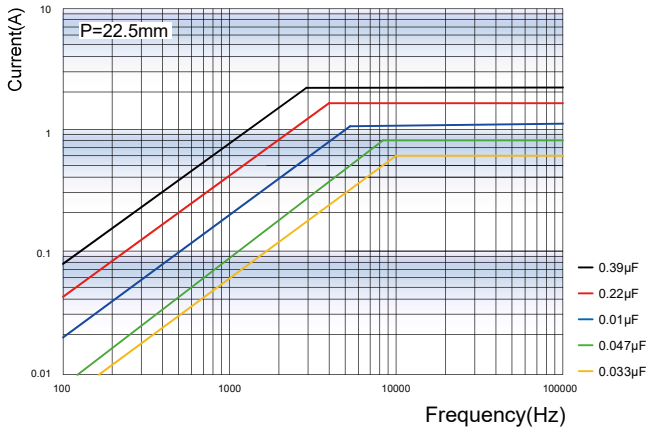
Characteristic Curve (Typical)

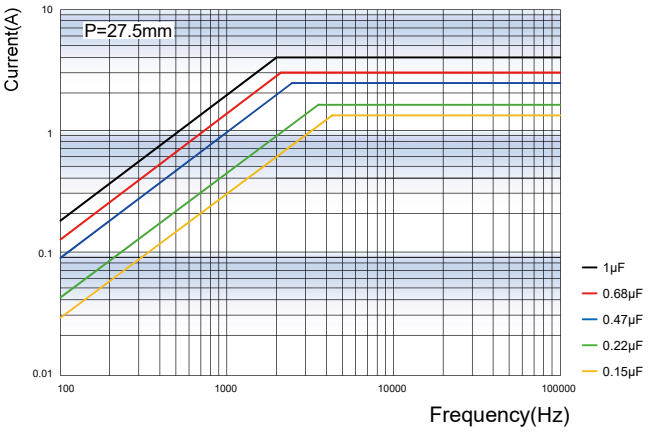
Permissible AC current I_{RMS} versus frequency f (for sonusoidal waveforms Top≤85˚C)

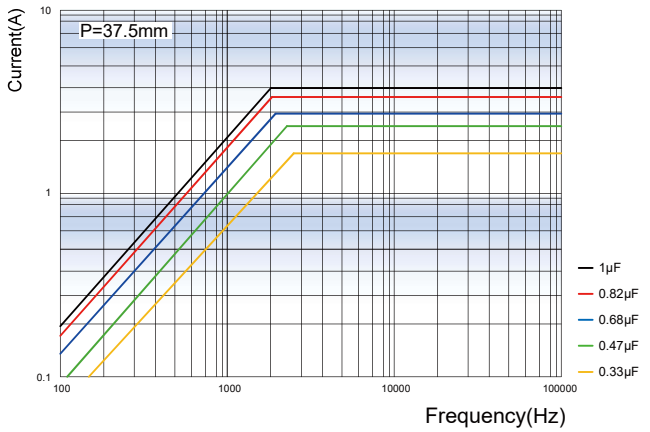


Characteristic Curve (Typical)

Permissible AC current I_{RMS} versus frequency f (for sonusoidal waveforms Top≤85℃)







Impedance Z versus frequency f

