HCY2-T

Metallized Polypropylene Film Interference Suppression Capacitor (Class Y2, 300 Va.c., THB Grade IIIB)



Features

- Metallized polypropylene film
- Capable of withstanding over-voltage stress
- Excellent self-healing performance
- UL 94 V-0 compliant
- Excellent long-term capacitance stability under harsh environments (e.g., high temperature and high humidity)
- Automotive (AEC–Q200) grade

Typical Applications

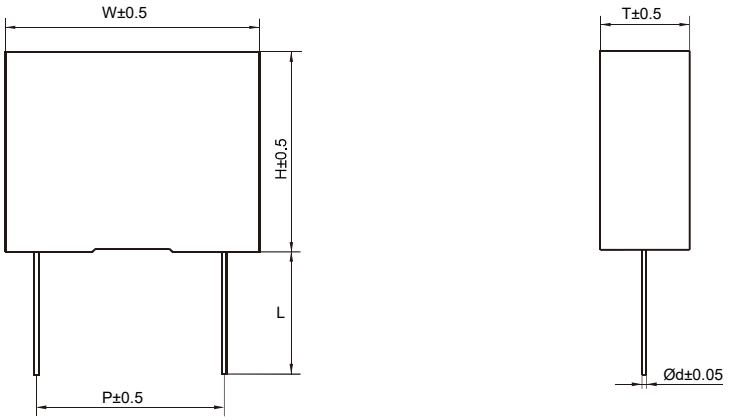
- For use in electromagnetic interference (EMI) suppression filter in "line-to-ground" applications Typical applications include series connection with the mains and operation in harsh environments such as high temperature and high humidity

Safety Approvals

CQC	CQC	GB/T 6346.14	0.001μF-1.0μF; 300Va.c.;40/110/56/B File No.: CQC24001429840
c US	UL/cUL	UL 60384-14 CSAE60384-1 CSA E60384-14	0.001μF-1.0μF; 300Va.c.;40/110/56/B; File No.: E311928
15	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. Top≤85℃ 1.33%/℃ derating when 85℃<Top≤110℃		
Capacitance range	C_N	0.001μF~1.0μF		
Capacitance tolerance		±10%(K),±20%(M)		
Dissipation factor	tanδ	0.001μF≤C_N≤0.47μF	≤0.0030(10kHz)	
		0.47μF<C_N≤1.0μF	≤0.0040(10kHz)	
Insulation resistance (20℃,100V,1min)	IR	C_N≤0.33μF	IR≥15000MΩ	
		C_N>0.33μF	IR·C_N≥5000s	
Climatic category/ Passive flammability category		40/110/56/B		
Operating temperature range	T_{OP}	-40℃~+110℃		
Voltage proof	U_{t-t}	Between terminals	C_N≤0.33μF	4000Vd.c. or 2000Va.c., 2s
			C_N>0.33μF	3700Vd.c. or 2000Va.c., 2s
	U_{t-c}	Between terminals and case	2500Va.c.(1min)	
THB test (Damp heat test with loading)	THB	Temperature: 85℃± 2℃; Humidity: 85%RH±2%RH Voltage: 300 Va.c. 50 Hz; Duration: 1000 hours Capacitance change(ΔC/C): ≤10% Dissipation factor change (Δtanδ): ≤0.015(1kHz) Insulation resistance: ≥ 50% of the rated value		

Pulse handling capability	Lead spacing	15mm	22.5mm	27.5mm	37.5mm
	dV/dt (V/μs)	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	20	21
H	C	Y	2	-	T	/	Q	1	1	0	4	K	9	0	0	0	C	0	0	0

Series code

Rated voltage

Q1=300Va.c.

Rated capacitance

For example:
104=10×10⁴pF
=0.1μF

Capacitance tolerance

K=±10%
M=±20%

Pitch

6=15mm
9=22.5mm
B=27.5mm
F=37.5mm

Internal code

Lead form and packaging code

See table 1

Table 1: Lead Form and Packaging Code

Digit 18		Digit 19		Digit 20		Digit 21	
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	7	P_3=38mm,H=18.0mm (Pitch=22.5mm or 27.5mm)
		8	F=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

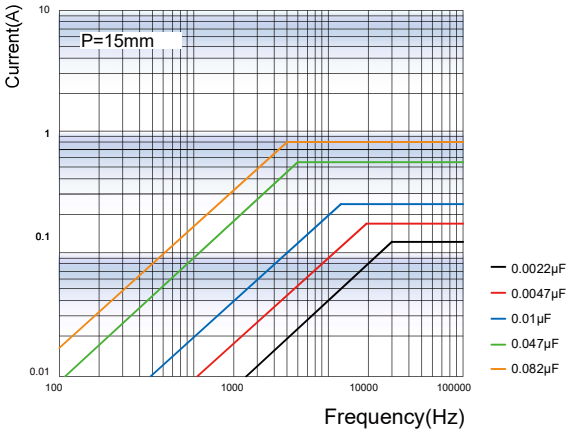
Unit: mm

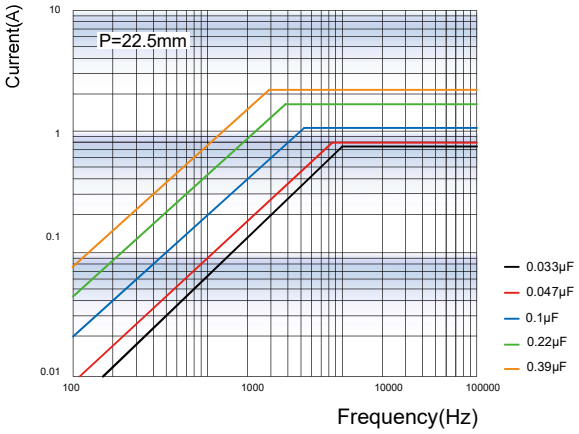
300Va.c.													
C_N(μF)	W	H	T	P	d	Ordering Information	C_N(μF)	W	H	T	P	d	Ordering Information
0.010	18.0	11.0	5.0	15.0	0.6	HCY2-T/Q1103+6000****	0.39	26.5	29.5	14.5	22.5	0.8	HCY2-T/Q1394+9000****
0.015	18.0	12.0	6.0	15.0	0.6	HCY2-T/Q1153+6000****	0.15	32.0	20.0	11.0	27.5	0.8	HCY2-T/Q1154+B000****
0.022	18.0	13.5	7.5	15.0	0.8	HCY2-T/Q1223+6000****	0.22	32.0	22.0	13.0	27.5	0.8	HCY2-T/Q1224+B000****
0.027	18.0	13.5	7.5	15.0	0.8	HCY2-T/Q1273+6000****	0.33	32.0	28.0	14.0	27.5	0.8	HCY2-T/Q1334+B000****
0.033	18.0	14.5	8.5	15.0	0.8	HCY2-T/Q1333+6000****	0.39	32.0	28.0	14.0	27.5	0.8	HCY2-T/Q1394+B000****
0.039	18.0	14.5	8.5	15.0	0.8	HCY2-T/Q1393+6000****	0.47	32.0	30.0	16.0	27.5	0.8	HCY2-T/Q1474+B000****
0.047	18.0	16.0	10.0	15.0	0.8	HCY2-T/Q1473+6000****	0.56	32.0	30.0	16.0	27.5	0.8	HCY2-T/Q1564+B000****
0.056	18.0	16.0	10.0	15.0	0.8	HCY2-T/Q1563+6000****	0.68	32.0	33.0	18.0	27.5	0.8	HCY2-T/Q1684+B000****
0.068	18.0	19.0	11.0	15.0	0.8	HCY2-T/Q1683+6000****	0.82	32.0	37.0	22.0	27.5	0.8	HCY2-T/Q1824+B000****
0.082	18.0	19.0	11.0	15.0	0.8	HCY2-T/Q1823+6000****	1.0	32.0	37.0	22.0	27.5	0.8	HCY2-T/Q1105+B000****
0.047	26.5	15.0	6.0	22.5	0.8	HCY2-T/Q1473+9000****	0.33	42.0	22.0	12.0	37.5	1.0	HCY2-T/Q1334+F000****
0.068	26.5	16.0	7.0	22.5	0.8	HCY2-T/Q1683+9000****	0.39	42.0	24.0	13.0	37.5	1.0	HCY2-T/Q1394+F000****
0.10	26.5	19.0	10.0	22.5	0.8	HCY2-T/Q1104+9000****	0.47	42.0	24.0	13.0	37.5	1.0	HCY2-T/Q1474+F000****
0.15	26.5	20.0	11.0	22.5	0.8	HCY2-T/Q1154+9000****	0.56	42.0	30.0	16.0	37.5	1.0	HCY2-T/Q1564+F000****
0.22	26.5	22.0	12.0	22.5	0.8	HCY2-T/Q1224+9000****	0.68	42.0	30.0	16.0	37.5	1.0	HCY2-T/Q1684+F000****
0.27	26.5	29.5	14.5	22.5	0.8	HCY2-T/Q1274+9000****	0.82	42.0	33.0	18.0	37.5	1.0	HCY2-T/Q1824+F000****
0.33	26.5	29.5	14.5	22.5	0.8	HCY2-T/Q1334+9000****	1.0	42.0	33.0	18.0	37.5	1.0	HCY2-T/Q1105+F000****

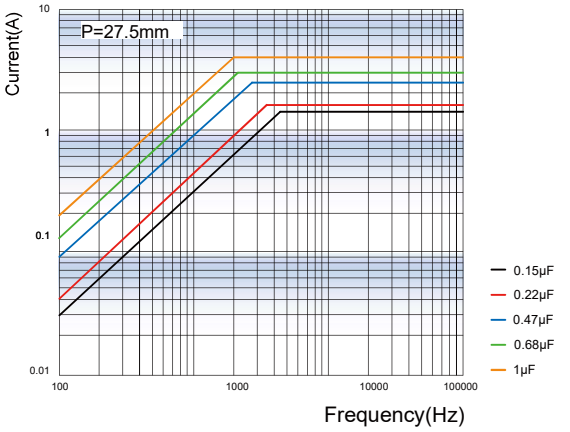
Notes: 1) "+" means capacitance tolerance,K=±10%,M=±20%;
2)"****" means lead form and packaging code (See table 1) .

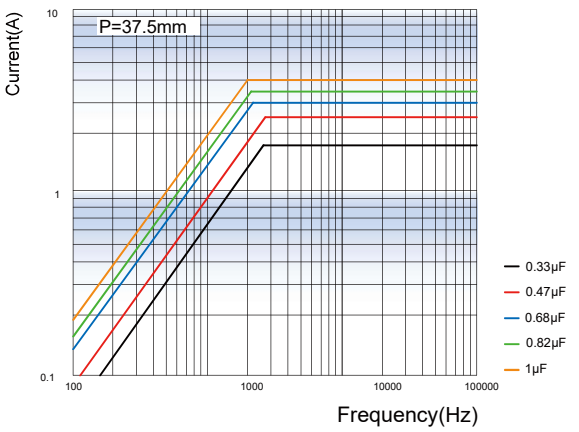
Characteristic Curve (Typical)

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









Impedance Z versus frequency f

