Type HES 105 ºC High Energy Screw Terminal Aluminum Electrolytic

High Power Input Filtering, Screw Terminal Capacitors

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Type HES screw terminal, aluminum electrolytic capacitors have excellent reliability and are ideal for high power input and charge-discharge applications for welders and strobe lights. The HES can be operated at 105 ºC at full rated voltage

Highlights

- High reliability - 1000 hours at 105 ºC
- Great for charge-discharge applications
- Ideal for high power input filter applications
- Operates at 105 ºC at full rated voltage

RoHS Compliant

Specifications

Capacitance Range: 300 to 5,600 µF
Voltage Range: 350 to 450 WVdc
Capacitance Tolerance: –0% +50%
Operating Temperature: –40 ºC to +105 ºC
Ripple Current Multipliers: Ambient Temperature

+25 ºC	+35 ºC	+45 ºC	+55 ºC	+65 ºC	+85 ºC
2.00	1.88	1.72	1.58	1.42	1.00

Rated Voltage	Frequency / Ripple Multiplier				
	120 Hz	400 Hz	1000 Hz	2500 Hz	10 kHz
350 to 450	1.000	1.080	1.113	1.175	1.230

DC Leakage Current: $I \leq 3\sqrt{CV}$ after 5 minutes
Not to exceed 4.0 mA
C = Capacitance in µF
V = Rated Voltage
I = Leakage current in mA

QA Stability Test:
Life test:
1000 h @ +105 ºC
Ripple Test:
2000 h, full load @ +85 ºC
Shelf test:
500 h @ +105 ºC

See Type 550C for New Designs

Click here to see: Hardware & Mounting Options

Click here to see: Mechanical Details

Type HES 105 °C High Energy Screw Terminal Aluminum Electrolytic

Ratings

Cap (µF)	Catalog Part Number	Typical Max ESR 120 Hz (Ω)	Max Ripple 120 Hz +85 °C (A) RMS	Dia. (Inches)	Length (Inches)
350 WVdc (400 Vdc Surge)					
600	HES601G350V2C	0.173	2.6	2.00	2.125
900	HES901G350V5C	0.110	4.6	2.00	5.125
1,100	HES112G350V3C	0.099	4.0	2.00	3.125
1,400	HES142G350W5C	0.080	6.2	2.50	5.125
1,600	HES162G350V4C	0.062	5.6	2.00	4.125
1,900	HES192G350V4L	0.053	6.4	2.00	4.625
2,500	HES252G350W4C	0.045	7.4	2.50	4.125
3,100	HES312G350X3L	0.040	8.6	3.00	3.625
3,400	HES342G350W5C	0.034	9.4	2.50	5.125
3,700	HES372G350X4C	0.034	9.8	3.00	4.125
4,400	HES442G350X4L	0.029	11.0	3.00	4.625
5,000	HES502G350X5C	0.026	12.1	3.00	5.125
5,600	HES562G350X5L	0.024	13.2	3.00	5.625
400 WVdc (450 Vdc Surge)					
300	HES301G400U3C	0.275	2.2	1.75	3.125
500	HES501G400V2C	0.180	2.6	2.00	2.125
1,300	HES132G400V4C	0.066	5.4	2.00	4.125
2,000	HES202G400V5L	0.044	7.3	2.00	5.625
2,000	HES202G400W4C	0.048	7.3	2.50	4.125
2,100	HES212G400X5L	0.045	9.5	3.00	5.625
3,000	HES302G400W5L	0.033	9.9	2.50	5.625
3,500	HES352G400X4L	0.031	10.7	3.00	4.625
4,100	HES412G400X5C	0.027	11.9	3.00	5.125
4,600	HES462G400X5L	0.025	13.0	3.00	5.625

Cap (µF)	Catalog Part Number	Typical ESR 120 Hz (Ω)	Max Ripple 120 Hz +85 °C (A) RMS	Dia. (Inches)	Length (Inches)
450 WVdc (525 Vdc Surge)					
300	HES301G450V3C	0.268	2.4	2.00	3.125
400	HES401G450V3L	0.203	2.9	2.00	3.625
550	HES551G450V4C	0.150	3.6	2.00	4.125
700	HES701G450V3C	0.125	3.5	2.00	3.125
1,200	HES122G450X4L	0.069	7.1	3.00	4.625
1,500	HES152G450X5L	0.056	8.5	3.00	5.625
1,600	HES162G450V5L	0.053	6.9	2.00	5.625
1,700	HES172G450W4C	0.051	7.1	2.50	4.125
2,000	HES202G450X5L	0.041	9.7	3.00	5.625
2,200	HES222G450X5L	0.040	10.1	3.00	5.625
2,400	HES242G450W5C	0.038	9.0	2.50	5.125
2,700	HES272G450W5L	0.034	9.9	2.50	5.625
3,600	HES362G450X5C	0.028	11.7	3.00	5.125
4,000	HES402G450X5L	0.025	12.7	3.00	5.625

See Type 550C for New Designs

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See Type 550C for New Designs