



Advanced Capacitors for Demanding Applications

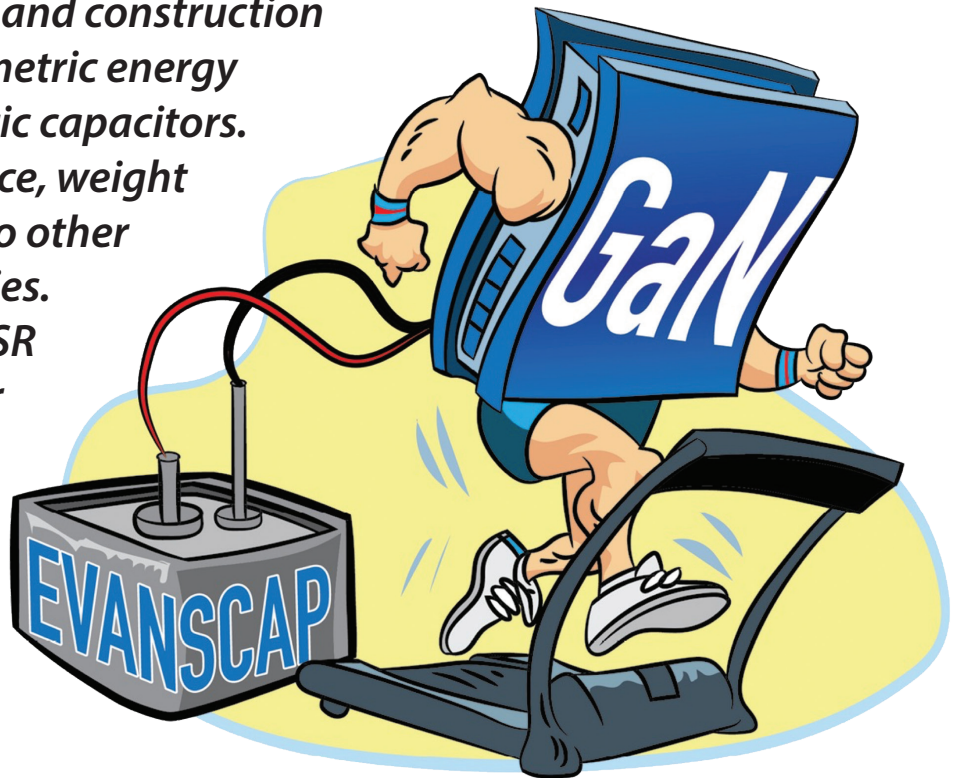
EVANSCAPS' unique chemistry and construction provide 5 to 10 times the volumetric energy density of aluminum electrolytic capacitors. Benefits include savings of space, weight and power (SWaP) compared to other tantalum capacitor technologies. EVANSCAPS provide the low ESR and power density required for high current pluse power.

BRDGE POWER HOLD-UP Today's avionics require onboard power for MIL-STD 704/DO-160. EVANSCAPS provide bulk capacitance for high power requirements.

Example Rating:
TDD4080123 – 80Volts
12,000 μ F, <15m Ω , <25cc



Realize the Potential of GaN...Exercise with EVANSCAPS!



RADAR EVANSCAPS provide bulk capacitance, higher currents and excellent heat transfer for GaN Amplifiers in Phased Array Radar.

LASER EVANSCAPS provide very high current discharge and bulk capacitance to maintain voltage throughout the pulse with a minimum of droop.

For critical systems, EVANSCAPS offer excellent reliability; over 5 million hours MTBF; unlimited shelf life, and significant savings of space, weight, and power (SWaP) compared to other capacitor technologies.



HyCap Series

DSCC 93026 & DSCC 10004 Series HyCap

HyCap offers the same proven Hybrid Capacitor technology in the traditional tantalum wet case style. HyCap Series Hybrid Capacitors are available in standard DSCC 93026 and DSCC 10004 ratings, and in newer extended range capacitance ratings. Full temperature range of -55C to 125C, with 2,000 hrs life at 125C. HC-HT styles are for 200C (see below)

PART NUMBER	DSCC PN	Voltage 85° C	Voltage 125° C	Cap 120HZ (µF)	ESR 120Hz max (Ω)	Length(L) / Diameter(D)
HC2B025102	10004-19	25	15	1,000	0.50	.641 / .281
HC2B050471	10004-20	50	30	470	0.90	.641 / .281
HC3B050681	10004-25	50	30	680	0.90	.641 / .281
HCD050681	93026-40	50	30	680	0.70	1.062 / 0.375
HC2D050152	10004-08	50	30	1500	0.45	1.062 / 0.375
HC3D050222	10004-15	50	30	2200	0.60	1.062 / 0.375
HC8060151	93026-42	60	40	150	1.10	.641 / .281
HC2B060331	10004-21	60	40	330	0.90	.641 / .281
HC3B060471	10004-26	60	40	470	1.00	.641 / .281
HC3B060561	10004-27	60	40	560	1.00	.641 / .281
HCD060561	93026-44	60	40	560	0.80	1.062 / 0.375
HC2D060122	10004-16	60	40	1,200	0.50	1.062 / 0.375
HC3D060182	10004-28	60	40	1,800	0.50	1.062 / 0.375
HCB075111	93026-46	75	50	110	1.30	.641 / .281
HCD075471	93026-48	75	50	470	0.90	1.062 / 0.375
HC2B075221	10004-22	75	50	220	1.00	.641 / .281
HC3B075331	10004-29	75	50	330	1.30	.641 / .281
HC2D075941	10004-17	75	50	940	0.50	1.062 / 0.375
HC3D075122	10004-30	75	50	1,200	0.80	1.062 / 0.375
HC8100680	93026-50	100	65	68	2.10	.641 / .281
HC2B100151	10004-23	100	60	150	1.20	.641 / .281
HC2D100221	93026-52	100	65	220	1.20	1.062 / 0.375
HC2D100471	10004-18	100	65	470	0.70	1.062 / 0.375
HCD125151	93026-56	125	85	150	1.60	1.062 / 0.375
HC2D125241	10004-14	125	85	240	0.80	1.062 / 0.375
HC2D125331	10004-24	125	85	330	0.80	1.062 / 0.375

HyCap High Temperature "HT" series



High temperature HyCap Series Hybrid Capacitors are for Operation to 200C. Suited for down hole exploration environments, or other high temperature applications these HT HyCap capacitors are in the industry standard form factor. HC-HT units are up to 2,000 hr life at 200C. HC2-HT units are up to 1,000hrs at 200C

PART NUMBER	DSCC PN	Voltage 175° C	Voltage 200° C	Cap 120HZ (µF)	ESR 120Hz max (Ω)	Length(L) / Diameter(D)
HC2B050471HT	N/A	30	25	470	0.90	.641 / .281
HC2D050152HT	N/A	30	25	1500	0.5	1.062 / 0.375
HCD050681HT	NA	35	30	680	0.7	1.062 / 0.375
HC2B060331HT	N/A	36	30	330	0.90	.641 / .281
HCD060561HT	NA	42	36	560	0.80	1.062 / 0.375
HC2D060122HT	N/A	36	30	1,200	0.50	1.062 / 0.375
HC2B075221HT	N/A	45	37	220	1.00	.641 / .281
HC2D075941HT	N/A	45	37	940	0.60	1.062 / 0.375
HCB075111HT	NA	50	45	110	1.30	.641 / .281
HCD075471HT	NA	50	45	470	0.90	1.062 / 0.375
HC2B100151HT	N/A	60	50	150	1.2	.641 / .281
HC2D100471HT	N/A	60	50	470	0.7	1.062 / 0.375
HCB100680HT	NA	70	60	68	2.1	.641 / .281
HCD100221HT	NA	70	60	220	1.2	1.062 / 0.375
HCD125151HT	NA	85	75	150	1.60	1.062 / 0.375
HC2D125331HT	N/A	75	62	330	0.80	1.062 / 0.375

THQA2 / THQM2 Series



THQA2 series Hybrid Capacitors offer high power in a compact, hermetic, tantalum package. Applications include power interruption buffer, filtering and high current pulse generation. Full temperature range of -55C to 125C. Proven reliability and environmental ruggedness. The THM2 Configuration provide the THQA2 capacitor assembled into a standard 4 pin mount suitable for automated board level assembly. Pins and leads are pre solder coated with 60/40 Pb/Sn solder

PART NUMBER	DSCC PN	Voltage 85° C	Voltage 125° C	Cap 120HZ (µF)	ESR 1 KHZ max (mΩ)	HEIGHT (H) (in)
THQA2010103	04005-01	10	6	10,000	200	0.274
THQM2010103	04005-11	10	6	10,000	200	0.450
THQA2016502	04005-02	16	9.5	5,000	200	0.274
THQM2016502	04005-12	16	9.5	5,000	200	0.450
THQA2025382	04005-03	25	15	3,800	200	0.274
THQM2025382	04005-13	25	15	3,800	200	0.450
THQA2030302	04005-04	30	18	3,000	250	0.274
THQM2030302	04005-14	30	18	3,000	250	0.450
THQA2035252	04005-05	35	21	2,500	250	0.274
THQM2035252	04005-15	35	21	2,500	250	0.450
THQA2050152	04005-06	50	30	1,500	250	0.274
THQM2050152	04005-16	50	30	1,500	250	0.450
THQA2060871	04005-07	60	36	870	350	0.274
THQM2060871	04005-17	60	36	870	350	0.450
THQA2075561	04005-08	75	45	565	500	0.274
THQM2075561	04005-18	75	45	565	500	0.450
THQA2100361	04005-09	100	60	360	800	0.274
THQM2100361	04005-19	100	60	360	800	0.450
THQA2125211	04005-10	125	75	215	1250	0.274
THQM2125211	04005-20	125	75	215	1250	0.450

THQA2-HT High Temperature Series

THQA2-HT Hybrid Capacitors are for Operation to 200C. Suited for down hole exploration environments, or other high temperature applications. THQA2-HT Hybrid Capacitors are in the same form factor as the standard THQA2, with life of 1,000hrs at 200C or 2,000 hrs at 175C



PART NUMBER	DSCC PN	Voltage 175° C	Voltage 200° C	Cap 120HZ (µF)	ESR 1 KHZ max (mΩ)	HEIGHT (H) (in)
THQA2075561HT	NA	37.5	30	560	500	0.274
THQA2100361HT	NA	50	40	360	800	0.274
THQA2125211HT	NA	62.5	50	215	1250	0.274

THQS2 "Shock hard" Series



THQS2 series "Shock Hard" Hybrid Capacitors are for applications with high impact shock requirements. Unlimited shelf life. Applications are limited cycle, limited time on charge such as missile fuzing and short duration power hold up - Max of 2 hrs at rated voltage and temperature. Full temperature range of -55C to 85C. Impact shock capability of 30,000g and higher. Note THQS2 Products are not for export.

PART NUMBER	DSCC PN	Voltage 85° C	Voltage 125° C	Cap 120HZ (µF)	ESR 1 KHZ max (mΩ)	HEIGHT (H) (in)
THQS2008133	NA	8	4.8	13,000	200	0.341
THQS2010103	NA	10	6	10,000	200	0.341
THQS2016622	NA	16	9.5	6,250	200	0.341
THQS2025442	NA	25	15	4,400	200	0.341
THQS2035292	NA	35	21	2,900	250	0.341
THQS2050162	NA	50	30	1,600	250	0.341

Packaged THQ3 Capacitors

1PTHQ3 Series - "Single Pack"



A Packaged THQ3 Hybrid Capacitor is available for harsh environmental conditions. The THQ3 capacitor is rigidly contained in an anodized aluminum package, fully potted with epoxy. The case contains threaded insert mounting holes on the base.

PART NUMBER	DSCC PN	Voltage 85° C	Voltage 125° C	Cap 120HZ (µF)	ESR 1 KHZ max (mΩ)
THQ1010503	N/A	10	6	50,000	50
THQ1016303	N/A	16	9.5	30,000	50
THQ1025183	N/A	25	15	18,000	50
THQ1035123	N/A	35	21	12,000	50
THQ1050802	N/A	50	30	8,000	60
THQ1063402	N/A	63	37.5	4,000	100
THQ1080282	N/A	80	48	2,800	100
THQ1100192	N/A	100	60	1,900	125
THQ1110152	N/A	110	66	1,500	200
THQ1125112	N/A	125	75	1,100	200

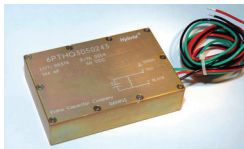
3STHQ3 or 3PTHQ3 Series - "3 Pack"



"3 pack" capacitor bank assembly consists of three internal THQ3 capacitors, soldered to a custom designed circuit board, with all necessary balancing resistors, and wiring. The assembly is completely sealed and epoxy potted in a rugged anodized aluminum case. The three THQ3 capacitors may be wired in series, for higher Operating voltage, or in parallel for higher capacitance. Case size is 4.47" X 1.59" X 1.07", Weight is 500 g.

PART NUMBER	DSCC PN	Voltage 85° C	Voltage 125° C	Cap 120HZ (µF)	ESR 1 KHZ max (mΩ)
3STHQ3063123	N/A	150	90	4,000	100
3STHQ3080822	N/A	200	120	2,700	110
3STHQ3100572	N/A	240	144	1,900	140
3STHQ3125332	N/A	300	180	1,100	180
3PTHQ3010154	N/A	10	6	450,000	10
3PTHQ3016903	N/A	16	9.5	270,000	15
3PTHQ3025543	N/A	25	15	162,000	15
3PTHQ3035363	N/A	35	21	108,000	20
3PTHQ3050243	N/A	50	30	72,000	20
3PTHQ3063123	N/A	63	37.5	36,000	25
3PTHQ3080822	N/A	80	48	24,600	25
3PTHQ3100572	N/A	100	60	17,100	30
3PTHQ3125332	N/A	125	75	9,900	35

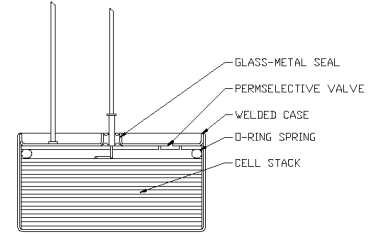
6PTHQ3 Series - "6 Pack"



"6 pack" capacitor bank assembly consists of six internal THQ3 capacitors soldered to custom circuit boards, with all necessary balancing resistors, and wiring. The assembly is completely sealed and epoxy potted in a rugged anodized aluminum case. The six THQ3 capacitors are wired in parallel. Case size is 4.47" X 2.99" X 1.07", weight is 860g for 10 to 50V and 900g for 63V to 125V

PART NUMBER	DSCC PN	Voltage 85° C	Voltage 125° C	Cap 120HZ (µF)	ESR 1 KHZ max (mΩ)
6PTHQ3010154	N/A	10	6	900,000	50
6PTHQ3016903	N/A	16	9.5	540,000	50
6PTHQ3025543	N/A	25	15	320,000	50
6PTHQ3035363	N/A	35	21	220,000	50
6PTHQ3050243	N/A	50	30	144,000	50
6PTHQ3063123	N/A	63	37.5	72,000	55
6PTHQ3080822	N/A	80	48	50,000	55
6PTHQ3100572	N/A	100	60	34,000	60
6PTHQ3125332	N/A	125	75	20,000	60

Capattery Series EDLC Capacitors



Capattery style EDLC "super capacitor" are designed for longer duration power hold-up and memory back-up applications. Specifications are per DSCC 92001. Full operating temperature range of -55C to 85C. Unlimited cycle life. Steady state charge life is > 25 years. Unlimited shelf life. Shock hardened models for weapons systems, withstand shocks measured up to 100,000G and spin rates > 3,000. Able to power electronics for penetrator testing.

Capattery RE & RS Series			Shock hardened series		
Part#	Description		Part#	Description	
	WDC	Cap		WDC	Cap
RS055105	5.5v	1.0F	RSS055105	5.5v	1F
RS100564	10v	.56F	RSS110504	11v	.5F
RS110474	11v	.47F	RES160504	16v	.5F
RE055155	5.5	1.5F	RES250333	25v	.033F
RE110504	11	.5F			
RE110754	11	.75F			
RE055105	5.5	1F			

HQ Series



With the similar performance and rating of the tantalum case THQ1, The HQ1 has a polypropylene case that is lighter and less costly than a metal case. The Near Hermetic seal is provided by ultra sonically welded case and double Viton O rings at the leads. HQ1 has a life of 1,000 hrs with full rated voltage at 70C. Significantly longer life is achieved with lower temp and voltage de-rate.

PART NUMBER	DSCC PN	Voltage 70° C	Cap 120HZ (µF)	ESR 1 KHZ max (mΩ)
HQ1010503	04002-01	10	50,000	50
HQ1016363	04002-02	16	36,000	50
HQ1025233	04002-03	25	23,000	50
HQ1035123	04002-04	35	12,000	50
HQ1050802	04002-05	50	8,000	60
HQ1063402	04002-06	63	4,000	100
HQ1080282	04002-07	80	2,800	100
HQ1100192	04002-08	100	1,900	125
HQ1110152	04002-09	110	1,500	200
HQ1125112	04002-10	125	1,100	200



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