

IGBT Absorption Capacitor(Ground Strip) YHJ

Features & Applications

- Applicable to high voltage and high frequency pulse circuits.
- High-temperature resistant PP film as dielectric , no inductance winding structure.
- Solvent resistant plastic housing, potted with thermally conductive resin.
- Low equivalent series resistance and able to withstand high ripple current.
- Able to withstand impacting of high-peak current.
- Low capacitance loss, low self-inductance, low internal temperature.
- Long service life, excellent flame retardant property (level of UL94V-0)
- Suitable as the absorption capacitor of IGBT.

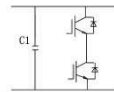


Technical Parameter

Norms Reference	IEC 61071, GB/T 17702
Working Temperature	-40°C ~ +85°C [$\Theta_{max}(\text{hotspot}) \leq +85^\circ\text{C}$]
Storage Temperature	-40°C ~ +85°C
Rated Voltage	1000Vdc ~ 3000Vdc
Range Of Capacitance	0.047 μF ~ 5 μF
Allowable Capacitance Deviation	$\pm 5\%$ (J), $\pm 10\%$ (K)
Voltage Test Between Terminals	1.5U _N (10s, 25°C $\pm 5^\circ\text{C}$)

Voltage Test Between Terminals And Case	3000Vdc (60s, 50/60Hz, 25°C $\pm 5^\circ\text{C}$)
Dielectric Dissipation Factor	2×10^{-4}
Over-voltage	1.5U _N applied to 10s at 25 $\pm 5^\circ\text{C}$
Expected Service Life	100 000h (U _N , $\Theta_{\text{hotspot}}=70^\circ\text{C}$)

Typical Circuit



YHJ Common Specification

C _N (μF)	ESR@10kHz (m Ω)	I _{rms} @60°C @10kHz (A)	I _{peak} (A)	dv/dt (V/ μs)	L _s (nH)	L (mm)	B (mm)	H (mm)	Part Number
U _N = 1000Vdc, U _S =1500Vdc, U _{rms} = 480Vac									
0.68	3.3	15	340	500	25	42.5	24.5	27.5	YHJ1026803K0B
0.75	3.2	15.5	375	500	25	42.5	24.5	27.5	YHJ1027503K0B
0.75	3.2	15	375	500	25	42.5	22	30	YHJ1027503K0C
1	2.9	17	500	500	25	42.5	28	37	YHJ1021004K0B
1.2	2.5	22	600	500	25	42.5	33.5	35.5	YHJ1021204K0B
1.2	2.5	21.5	600	500	25	42.5	28	37	YHJ1021204K1C
1.5	2.2	23.5	750	500	25	42.5	33.5	35.5	YHJ1021504K0B
2	2	26.5	1000	500	25	42.5	33	45	YHJ1022004K2C
2.2	2.5	26.5	770	350	35	57.5	30	45	YHJ1022204K3C
2.5	2.1	28	875	350	35	57.5	30	45	YHJ1022504K3D
3	2.1	31	1050	350	35	57.5	35	50	YHJ1023004K3C
3.3	2	31	1155	350	35	57.5	35	50	YHJ1023304K3E
5	1.6	33	1750	350	35	57.5	42.5	56	YHJ1025004K3E

YHJ Common Specification

C _N (μF)	ESR@10kHz (m Ω)	I _{rms} @60°C @10kHz (A)	I _{peak} (A)	dv/dt (V/ μs)	L _s (nH)	L (mm)	B (mm)	H (mm)	Part Number
U _N = 1200Vdc, U _S =1800Vdc, U _{rms} = 500Vac									
0.33	5.1	12	210	650	25	42.5	24.5	27.5	YHJ1223303K0C
0.39	4.6	13	254	650	25	42.5	24.5	27.5	YHJ1223903K0B
0.39	4.6	12.5	254	650	25	42.5	17	28	YHJ1223903K1C
0.68	3.3	19	442	650	25	42.5	33.5	35.5	YHJ1226803K3C
0.68	3.3	18.5	442	650	25	42.5	22	30	YHJ1226803K3E
1	2.7	20.5	650	650	25	42.5	33.5	35.5	YHJ1221004K0B
1.2	2.4	23	780	650	25	42.5	30	45	YHJ1221204K2C
2	1.7	27	910	455	35	57.5	30	45	YHJ1222004K3C
2.5	2.3	31	1138	455	35	57.5	35	50	YHJ1222504K3D
3	2.1	32	1365	455	35	57.5	35	50	YHJ1223004K3C
U _N = 1500Vdc, U _S =2250Vdc, U _{rms} = 570Vac									
0.47	3.7	18	376	800	25	42.5	33.5	35.5	YHJ1524703K3C
0.47	3.7	17.5	376	800	25	42.5	28	37	YHJ1524703K3E
0.68	3.1	19	544	800	25	42.5	28	37	YHJ1526803K0B
1	2.5	22.5	800	800	25	42.5	30	45	YHJ1521004K0B
1.2	2.8	25	672	560	35	57.5	30	45	YHJ1521204K2C
1.8	2.3	29.5	1008	560	35	57.5	35	50	YHJ1521804K3D
2.5	1.8	31	1400	560	35	57.5	42.5	56	YHJ1522504K3C
U _N = 1700Vdc, U _S =2550Vdc, U _{rms} = 675Vac									
0.22	5.3	13	194	880	25	42.5	17	28	YHJ1722203K3D
0.33	5	14	290	880	25	42.5	24.5	27.5	YHJ1723303K3C
0.47	3.8	18.5	413	880	25	42.5	28	37	YHJ1724703K0B
0.56	3.1	19	492	880	25	42.5	28	37	YHJ1725603K1C
0.68	2.9	20	598	880	25	42.5	33.5	35.5	YHJ1726803K0B
1	2.7	23.5	610	610	35	57.5	30	45	YHJ1721004K3D
1.2	2.6	26.2	732	610	35	57.5	30	45	YHJ1721204K3C
2.2	1.8	30	1342	610	35	57.5	42.5	56	YHJ172204K3E
U _N = 2000Vdc, U _S =3000Vdc, U _{rms} = 630Vac									
0.1	13	7.5	100	1000	25	42.5	15	26	YHJ2021003K2C
0.15	7.5	10.5	150	1000	25	42.5	24.5	27.5	YHJ2021503K3C
0.22	5.1	12	220	1000	25	42.5	24.5	27.5	YHJ2022203K3C
0.33	4.1	16	330	1000	25	42.5	28	37	YHJ2023303K2C
0.47	3.2	20.5	470	1000	25	42.5	33	45	YHJ2024703K3C
0.56	3	21.5	560	1000	25	42.5	33	45	YHJ2025603K3C
1	2.8	27	700	700	35	57.5	35	50	YHJ2021004K2C
1.2	2.4	29	840	700	35	57.5	35	50	YHJ2021204K3C
1.8	2	31	1260	700	35	57.5	42.5	56	YHJ2021804K3D
U _N = 2500Vdc, U _S =3750Vdc, U _{rms} = 700Vac									
0.1	11.2	9	135	1350	25	42.5	24.5	27.5	YHJ2521003K2C
0.22	5.2	14.5	297	1350	25	42.5	28	37	YHJ2522203K3D
0.33	3.8	18	445	1350	25	42.5	33	45	YHJ2523303K3C
0.47	3.4	22	444	945	35	57.5	30	45	YHJ2524703K3E
0.68	3.2	25	642	945	35	57.5	35	50	YHJ2526803K2C
1	2.8	28	945	945	35	57.5	42.5	56	YHJ2521004K3C
U _N = 3000Vdc, U _S =4500Vdc, U _{rms} = 750Vac									
0.1	8.5	12	160	1600	25	42.5	33.5	35.5	YHJ3021003JK3E
0.1	8.5	11.5	160	1600	25	42.5	22	30	YHJ3021003K0B
0.15	6.1	14.5	240	1600	25	42.5	33.5	35.5	YHJ3021503K0B
0.15	6.1	14	240	1600	25	42.5	28	37	YHJ3021503K1C
0.22	1.3	17	352	1600	25	42.5	30	45	YHJ3022203K2C
0.33	4.2	21	288	870	35	57.5	30	45	YHJ3023303K3C
0.47	3.9	23	408	870	35	57.5	35	50	YHJ3024703K3D

*The listed dimension on the above chart is our common specifications, we can produce as customer's requests.