

3.2 Snubber Capacitors : STP-01R series

This series of capacitors have been specially developed for medium frequency range, higher dv/dt, peak current carrying capability.

Applications :

SCR Snubber and Commutation, Thyristor controlled rectifier circuits, Reduce or eliminate voltage or current spikes, Limit dv/dt and di/dt, Motor Speed Control and Static Drive, Harmonic Filter, Inverter and Converter.

Properties :

Low ESR, Excellent Frequency Response, High RMS Current Rating, High Pulse Current Ratings dv/dt, High Temperature, High Insulation Resistance, Low inductive, Flame Retardant Construction, Easy Installation

Electrical Connections :

STP-01R –Quick Terminals / Soldering tags or M6 Screw Threads

Electrical Characteristics :

Rated Voltage : 1,000Vdc – 2,600Vdc / 660Vrms – 1,100Vrms (can be customized)

Capacitance range : 0.1 - 1.5uF (can be customized)

Capacitance Tolerance : +/-5%; +/-10%

Ripple RMS Current : up to 16A

Equivalent Series Resistance (ESR) : measured at 25C 100kHz

Testing Voltage Terminal to Terminal : Vsurge 10 sec (can be customized)

Testing Voltage Terminal to Case : 4,500Vac at 105C 1min.

Insulation Resistance :250Vdc +25C >= 300,000Mohm

250Vdc +85C >= 50,000Mohm

250Vdc +105C >= 5,000Mohm

Reference Standard : IEC61071

Operate Temperature : +70C / +85C / +105C

Expected Service Life : 30,000 hours at rated Vac +85C / +105C

100,000 hours at rated Vdc +85C / +105C

Accelerated Life : 1.25 x rated AC voltage at +85C / +105C for 2,000 hours

Specifications and Size :

STP-01R Vndc = 1000V / Vrms = 660Vac / Vpeak = 940V 10s / Vsurge = 1700V 30s/day

Part Number	C _n uF	Diameter D mm	Length L Mm	ESR mohm 100khz	ESL nH	dv/dt v/us	Peak Current I _{peak} A	Irms 85C	Irms 105C
STP-01R474J1000D	0.47	30	55	7	40	620	290	7.5	3.3
STP-01R684J1000D	0.68	35	55	7	40	620	420	7.5	3.3
STP-01R105J1000D	1	35	73	7	50	480	480	14	6.0
STP-01R125J1000D	1.2	35	73	6	50	480	570	14	6.0
STP-01R155J1000D	1.5	40	73	6	50	480	720	14	6.0

STP-01R Vndc = 1200V / Vrms = 800Vac / Vpeak = 1130V 10s / Vsurge = 2000V 30s/day

Part Number	C _n uF	Diameter D mm	Length L Mm	ESR mohm 100khz	ESL nH	dv/dt v/us	Peak Current I _{peak} A	Irms 85C	Irms 105C
STP-01R224J1200D	0.22	30	55	7	30	1300	280	7.5	3.3
STP-01R334J1200D	0.33	35	55	7	30	1300	430	7.5	3.3
STP-01R474J1200D	0.47	35	55	6	40	740	340	9	4.0
STP-01R684J1200D	0.68	35	73	6	50	570	380	9	4.0
STP-01R105J1200D	1	40	73	5	50	570	570	9	4.0

STP-01R Vndc = 1350V / Vrms = 900Vac / Vpeak = 1270V 10s / Vsurge = 2300V 30s/day

Part Number	C _n uF	Diameter D mm	Length L Mm	ESR mohm 100khz	ESL nH	dv/dt v/us	Peak Current I _{peak} A	Irms 85C	Irms 105C
STP-01R104J1350D	0.1	30	55	7	30	1500	150	4	1.7
STP-01R154J1350D	0.15	30	55	7	30	1500	220	6	2.6
STP-01R224J1350D	0.22	30	55	8	40	850	180	5	2.1
STP-01R334J1350D	0.33	35	55	8	40	850	280	7	3.2
STP-01R474J1350D	0.47	35	73	6	50	660	310	8	3.5
STP-01R684J1350D	0.68	40	73	6	50	660	440	11	5.0
STP-01R105J1350D	1	45	73	5	50	660	660	16	7.0

STP-01R Vndc = 2600V / Vrms = 1100Vac / Vpeak = 1550V 10s / Vsurge = 3900V 30s/day

Part Number	C _n uF	Diameter D mm	Length L Mm	ESR mohm 100khz	ESL nH	dv/dt v/us	Peak Current I _{peak} A	Irms 85C	Irms 105C
STP-01R104J2600D	0.1	30	55	10	40	1200	120	6.2	2.7
STP-01R154J2600D	0.15	35	55	8	40	1200	180	6.2	2.7
STP-01R224J2600D	0.22	35	73	7	50	900	200	5.8	2.4
STP-01R334J2600D	0.33	40	73	6	50	900	300	5.8	2.4

