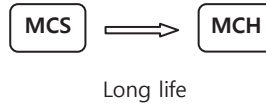


MCS series

Standard Long life RoHS Compliant

- 85°C 5,000Hrs assured.
- Long life, High ripple
- RoHS compliant
- Halogen-free capacitors are also available.



Specifications

Item	Characteristics	
Rated Voltage Range	10 ~ 100 Vdc	160 ~ 500 Vdc
Operating Temperature Range	-40 ~ +85 °C	-25 ~ +85 °C
Capacitance Tolerance	±20% (M) (at 20°C, 120Hz)	
Leakage Current	After 5 minutes application of rated voltage, leakage current not more than $I=3\sqrt{CV}$ or 5mA whichever is smaller Where, I:Max. Leakage current(µA), C:Nominal capacitance(µF), V:Rated voltage(Vdc) (at 20°C, 5min)	
Dissipation Factor(Tanδ)	The dissipation factor (Tanδ) shall not exceed the values shown in the ratings. (at 20°C, 120Hz)	
Temperature characteristics (Max,impedance ratio)	Rated voltage (Vdc)	10 ~ 100 160 ~ 500
	Z(-25°C)/Z(20°C)	- 8
	Z(-40°C)/Z(20°C)	12 -
	(at 120Hz)	
Load life	The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage is applied for specified life times at 85°C 5,000hrs. Capacitance change ≤±20%of the initial value Tan δ ≤200% of the initial specified value Leakage current ≤The initial specified value	
Shelf life	The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1,000 hours at 85°C without voltage applied. The rated voltage shall be applied to the capacitors for a minimum of 30 minutes at least 24 hours and not more than 48 hours before the measurements. Capacitance change ≤±20% of the initial value Tanδ ≤200% of the initial specified value Leakage current ≤The initial specified value	

Dimensions

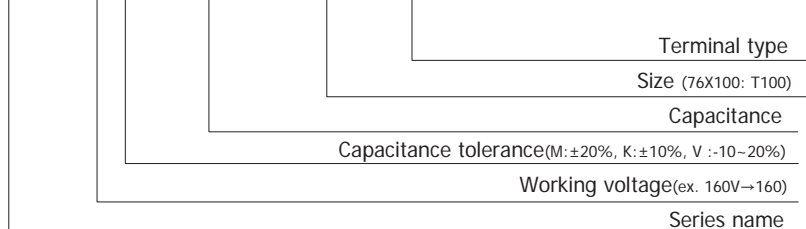
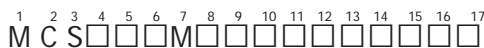
Terminal code : WO Type $\phi D = \phi 51 \sim \phi 100$

φ D	E	K	F	J
50	32.5	37.0	22.4	14.0
63.5	38.1	43.5	28.0	14.0
76	44.5	50.0	31.5	14.0
89	50.8	56.5	31.5	16.0
100	56.5	43.4	41.5	18.0

Additional dimensions: $\phi 51 \sim \phi 76 : G=6$, $\phi 89 : G=4$, $\phi 100 : G=10$

- Printed white color letter on black sleeve

Code numbering system



Ø35	P
Ø51	R
Ø63.5	S
Ø76	T
Ø89	U
Ø100	V

MCS series

Standard Ratings

Note1) Ripple current = Arms/85°C, 120Hz

WV (Vdc)	Cap (µF)	Size ØxL(mm)	Tan δ	Ripple ¹⁾	Code No
350	1,000	51 x 60	0.20	4.8	MCS350□102R060WOR
	1,200	51 x 70	0.20	5.5	MCS350□122R070WOR
	1,500	51 x 75	0.20	6.5	MCS350□152R075WOR
	1,800	51 x 90	0.20	7.1	MCS350□182R090WOR
	2,200	51 x 95	0.20	8.2	MCS350□222R095WOR
	2,700	51 x 105	0.20	9.3	MCS350□272R105WOR
		63.5 x 85	0.20	9.9	MCS350□272S085WOR
	3,300	63.5 x 95	0.20	11.8	MCS350□332S095WOR
		63.5 x 100	0.20	12.8	MCS350□392S100WOR
	3,900	76 x 85	0.20	13.0	MCS350□392T085WOR
		63.5 x 115	0.20	13.8	MCS350□472S115WOR
	4,700	76 x 90	0.20	14.2	MCS350□472T090WOR
		63.5 x 130	0.20	17.3	MCS350□562S130WOR
	5,600	76 x 100	0.20	16.8	MCS350□562T100WOR
		63.5 x 155	0.20	19.6	MCS350□682S155WOR
	6,800	76 x 115	0.20	19.0	MCS350□682T115WOR
		63.5 x 190	0.20	22.6	MCS350□822S190WOR
	8,200	76 x 130	0.20	21.0	MCS350□822T130WOR
90 x 120		0.20	24.0	MCS350□822U120WOR	
10,000	76 x 155	0.20	25.0	MCS350□103T155WOR	
	90 x 140	0.20	25.9	MCS350□103U140WOR	
12,000	90 x 150	0.20	28.0	MCS350□123U150WOR	
400	1,000	51 x 65	0.20	5.0	MCS400□102R065WOR
	1,200	51 x 75	0.20	5.8	MCS400□122R075WOR
	1,500	51 x 90	0.20	6.8	MCS400□152R090WOR
	1,800	51 x 95	0.20	7.3	MCS400□182R095WOR
	2,200	51 x 105	0.20	8.8	MCS400□222R105WOR
		63.5 x 85	0.20	8.9	MCS400□222S085WOR
	2,700	51 x 115	0.20	10.0	MCS400□272R115WOR
		63.5 x 90	0.20	10.6	MCS400□272S090WOR
	3,300	76 x 75	0.20	10.5	MCS400□272T075WOR
		63.5 x 95	0.20	11.8	MCS400□332S095WOR
	3,900	76 x 90	0.20	12.0	MCS400□332T090WOR
		63.5 x 115	0.20	12.8	MCS400□392S115WOR
	4,700	76 x 95	0.20	13.0	MCS400□392T095WOR
		63.5 x 130	0.20	14.8	MCS400□472S130WOR
	5,600	76 x 110	0.20	15.0	MCS400□472T100WOR
		63.5 x 155	0.20	17.0	MCS400□562S155WOR
	6,800	76 x 115	0.20	16.5	MCS400□562T115WOR
		63.5 x 190	0.20	20.5	MCS400□682S190WOR
8,200	76 x 130	0.20	19.2	MCS400□682T130WOR	
	90 x 120	0.20	20.5	MCS400□682U120WOR	
10,000	76 x 155	0.20	22.5	MCS400□822T155WOR	
	90 x 120	0.20	23.0	MCS400□822U120WOR	
12,000	76 x 170	0.20	26.1	MCS400□103T170WOR	
	90 x 130	0.20	24.2	MCS400□103U130WOR	
15,000	90 x 155	0.20	28.5	MCS400□123U155WOR	
18,000	90 x 190	0.20	34.8	MCS400□153U190WOR	
450	1,000	51 x 75	0.20	5.2	MCS450□102R075WOR
	1,200	51 x 85	0.20	6.3	MCS450□122R085WOR
	1,500	51 x 95	0.20	6.4	MCS450□152R095WOR
		51 x 105	0.20	7.6	MCS450□182R105WOR
	1,800	63.5 x 85	0.20	7.6	MCS450□182S085WOR
		63.5 x 90	0.20	9.0	MCS450□222S090WOR
	2,200	76 x 85	0.20	9.4	MCS450□222T085WOR
		63.5 x 95	0.20	10.5	MCS450□272S095WOR
	2,700	76 x 90	0.20	11.0	MCS450□272T090WOR
		63.5 x 115	0.20	12.1	MCS450□332S115WOR
	3,300	76 x 100	0.20	12.8	MCS450□332T100WOR

WV (Vdc)	Cap (µF)	Size ØxL(mm)	Tan δ	Ripple ¹⁾	Code No
450	3,900	76 x 110	0.20	14.2	MCS450□392T110WOR
	4,700	63.5 x 155	0.20	15.6	MCS450□472S155WOR
		76 x 115	0.20	15.1	MCS450□472T115WOR
	5,600	63.5 x 190	0.20	18.5	MCS450□562S190WOR
		90 x 120	0.20	18.4	MCS450□562U120WOR
	6,800	76 x 155	0.20	20.7	MCS450□682T155WOR
		90 x 125	0.20	20.0	MCS450□682U125WOR
	8,200	76 x 190	0.20	19.1	MCS450□822T190WOR
	12,000	90 x 190	0.20	29.5	MCS450□123U190WOR
	15,000	90 x 235	0.20	35.6	MCS450□153U235WOR
500	1,000	51 x 100	0.20	4.2	MCS500□102R100WOR
		63.5 x 80	0.20	4.2	MCS500□102S080WOR
	1,200	51 x 115	0.20	6.2	MCS500□122R115WOR
		63.5 x 85	0.20	6.3	MCS500□122S085WOR
	1,500	51 x 130	0.20	7.3	MCS500□152R130WOR
		63.5 x 90	0.20	7.1	MCS500□152S090WOR
	1,800	63.5 x 105	0.20	8.3	MCS500□182S105WOR
	2,200	63.5 x 120	0.20	9.6	MCS500□222S120WOR
	2,700	76 x 110	0.20	10.7	MCS500□272T110WOR
	3,300	76 x 115	0.20	12.4	MCS500□332T115WOR
		76 x 150	0.20	14.4	MCS500□392T150WOR
	3,900	90 x 120	0.20	14.4	MCS500□392U120WOR
		76 x 170	0.20	16.5	MCS500□472T170WOR
	4,700	90 x 130	0.20	15.8	MCS500□472U130WOR
		76 x 190	0.20	19.0	MCS500□562T190WOR
5,600	90 x 150	0.20	18.6	MCS500□562U150WOR	
	90 x 170	0.20	21.2	MCS500□682U170WOR	
8,200	90 x 190	0.20	24.5	MCS500□822U190WOR	
10,000	90 x 235	0.20	29.3	MCS500□103U235WOR	

Rated ripple current multipliers

Frequency(Hz)	50	60	120	1K	10K
Coefficient	0.80	0.82	0.80	1.35	1.40