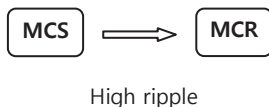


MCR series

High ripple RoHS Compliant

- 85°C 1,000Hrs assured.
- High ripple properties suited for use at voltage fluctuating area
- Suited for high frequency regenerative voltage for AC servomotor, general inverter.
- RoHS compliant
- Halogen-free capacitors are also available.



Specifications

Item	Characteristics				
Rated Voltage Range	350 ~ 450 Vdc				
Operating Temperature Range	-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)	<table border="1"> <tr> <td>Rated voltage (Vdc)</td> <td>350 ~ 450</td> </tr> <tr> <td>Z(-25°C)/Z(20°C)</td> <td>8</td> </tr> </table> <p>(at 120Hz)</p>	Rated voltage (Vdc)	350 ~ 450	Z(-25°C)/Z(20°C)	8
Rated voltage (Vdc)	350 ~ 450				
Z(-25°C)/Z(20°C)	8				
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

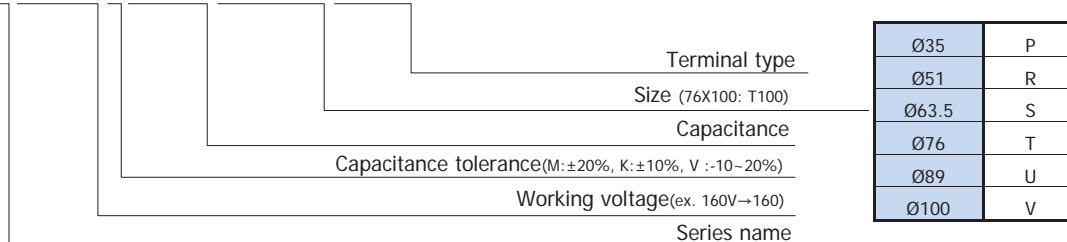
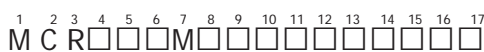
Terminal code : WO Type

φD	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

φD=φ51 ~ φ100
 ~φ89=M5x0.8x10 (3.23N.m)
 φ100=M8x1.25x16 (6.31N.m)
 Safety bulb
 360°±3
 45°±5
 φ51-φ76 : G=6
 φ89 : G=4
 φ100 : G=10
 L+4max.
 φD±1.8max.
 F±L
 G±L

- Printed white color letter on black sleeve

Code numbering system



MCR series

Standard Ratings

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

WV (Vdc)	Cap (µF)	Size ØxL(mm)	Tan δ	Ripple ¹⁾	Code No
350	820	35 x 80	0.15	3.3	MCR350□821P080WOR
	1,000	35 x 100	0.15	4.3	MCR350□102P100WOR
	1,800	51 x 80	0.15	7.2	MCR350□182R080WOR
	2,200	51 x 100	0.15	9.1	MCR350□222R100WOR
	2,700	51 x 110	0.15	10.8	MCR350□272R1105WOR
		63.5 x 80	0.15	10.6	MCR350□272S080WOR
	3,300	51 x 130	0.15	12.4	MCR350□332R130WOR
		63.5 x 90	0.15	11.9	MCR350□332S090WOR
	3,900	63.5 x 110	0.15	14.6	MCR350□392S110WOR
		76 x 80	0.15	14.1	MCR350□392T080WOR
	4,700	63.5 x 130	0.15	17.0	MCR350□472S130WOR
		76 x 90	0.15	16.4	MCR350□472T090WOR
	5,600	63.5 x 150	0.15	20.4	MCR350□562S150WOR
		76 x 110	0.15	19.7	MCR350□562T110WOR
	6,800	63.5 x 170	0.15	23.5	MCR350□682S170WOR
		76 x 130	0.15	22.9	MCR350□682T130WOR
	8,200	63.5 x 190	0.15	27.1	MCR350□822S190WOR
		76 x 150	0.15	26.4	MCR350□822T150WOR
10,000	76 x 170	0.15	31.1	MCR350□103T170WOR	
	90 x 130	0.15	30.2	MCR350□103U130WOR	
12,000	76 x 190	0.15	35.7	MCR350□123T190WOR	
	90 x 190	0.15	40.5	MCR350□153U190WOR	
400	680	35 x 80	0.15	3.2	MCR400□681P080WOR
	820	35 x 100	0.15	4.1	MCR400□821P100WOR
	1,500	51 x 80	0.15	7.5	MCR400□152R080WOR
	1,800	51 x 90	0.15	9.1	MCR400□182R090WOR
	2,200	51 x 110	0.15	10.4	MCR400□222R110WOR
	2,700	63.5 x 90	0.15	11.5	MCR400□272S090WOR
	3,300	51 x 150	0.15	13.7	MCR400□332R150WOR
		63.5 x 110	0.15	13.2	MCR400□332S110WOR
	3,900	63.5 x 130	0.15	16.0	MCR400□392S130WOR
		76 x 90	0.15	15.3	MCR400□392T090WOR
	4,700	63.5 x 150	0.15	18.7	MCR400□472S150WOR
		76 x 110	0.15	18.3	MCR400□472T110WOR
	5,600	63.5 x 170	0.15	22.0	MCR400□562S170WOR
		76 x 130	0.15	21.4	MCR400□562T130WOR
	6,800	76 x 150	0.15	25.4	MCR400□682T150WOR
		76 x 170	0.15	28.6	MCR400□822T170WOR
	8,200	90 x 130	0.15	27.8	MCR400□822U130WOR
		90 x 150	0.15	32.7	MCR400□103U150WOR
10,000	90 x 170	0.15	37.6	MCR400□123U170WOR	
	90 x 220	0.15	43.0	MCR400□153U220WOR	

WV (Vdc)	Cap (µF)	Size ØxL(mm)	Tan δ	Ripple ¹⁾	Code No
450	680	35 x 100	0.15	3.5	MCR450□681P100WOR
	820	35 x 110	0.15	3.9	MCR450□821P110WOR
	1,200	51 x 80	0.15	5.2	MCR450□122R080WOR
	1,500	51 x 100	0.15	6.3	MCR450□152R100WOR
	1,800	51 x 110	0.15	7.4	MCR450□182R110WOR
		63.5 x 80	0.15	7.9	MCR450□182S080WOR
	2,200	51 x 130	0.15	8.7	MCR450□222R130WOR
		63.5 x 100	0.15	8.6	MCR450□222S100WOR
	2,700	51 x 150	0.15	10.2	MCR450□272R150WOR
		76 x 80	0.15	10.0	MCR450□272T080WOR
	3,300	63.5 x 130	0.15	12.4	MCR450□332S130WOR
		76 x 100	0.15	11.8	MCR450□332T100WOR
	3,900	63.5 x 150	0.15	13.7	MCR450□392S150WOR
		76 x 110	0.15	14.0	MCR450□392T110WOR
	4,700	90 x 90	0.15	13.6	MCR450□392U090WOR
		63.5 x 145	0.15	16.5	MCR450□472S145WOR
	4,700	76 x 110	0.15	16.3	MCR450□472T110WOR
		90 x 110	0.15	15.8	MCR450□472U110WOR
5,600	63.5 x 190	0.15	19.4	MCR450□562S190WOR	
	90 x 130	0.15	19.1	MCR450□562U130WOR	
6,800	76 x 170	0.15	23.2	MCR450□682T170WOR	
	90 x 150	0.15	26.0	MCR450□822U150WOR	
10,000	90 x 190	0.15	31.3	MCR450□103U190WOR	
	90 x 220	0.15	35.5	MCR450□123U220WOR	

Rated ripple current multipliers

Frequency(Hz)	50	60	120	1K	10K
Coefficient	0.80	0.82	1.00	1.35	1.40