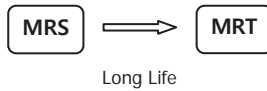


MRT series

- Long Life
- High Ripple
- RoHS Compliant

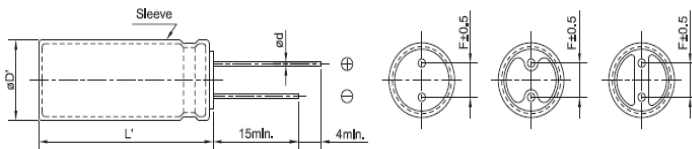
- 105°C 7,000~10,000Hrs assured.
- Long life, High ripple
- For SMPS, Ballaster, LED power
- RoHS compliant
- Halogen-free capacitors are also available.



Specifications

Item	Characteristics			
Rated Voltage Range	160 ~ 400 Vdc	450 ~ 500 Vdc		
Operating Temperature Range	-40 ~ +105 °C	-25 ~ +105 °C		
Capacitance Tolerance	±20% (M) (at 20°C, 120Hz)			
Leakage Current	I=0.01CV+40(μA) at CV ≤ 1,000, I=0.03CV+100(μA) at CV > 1,000 (at 20°C, 1min) I=0.04CV+100(μA) at CV ≤ 1,000, I=0.02CV+25(μA) at CV > 1,000 (at 20°C, 5min) Where, I:Max. Leakage current(μA), C:Nominal capacitance(μF), V:Rated voltage(Vdc)			
Dissipation Factor(Tanδ)	Rated voltage (Vdc)	160 ~ 250	350 ~ 500	
	Tanδ (max.)	0.20	0.24	
Temperature characteristics (Max,impedance ratio)	Rated voltage (Vdc)	160 ~ 250	350 ~ 400	450 ~ 500
	Z(-25°C)/Z(20°C)	3	5	6
	Z(-40°C)/Z(20°C)	6	6	-
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 105°C10,000hrs. (7,000hrs for 8Ø, 8,000hrs for 10Ø)			
	Capacitance change	≤±20%of the initial 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 105°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		

Dimensions

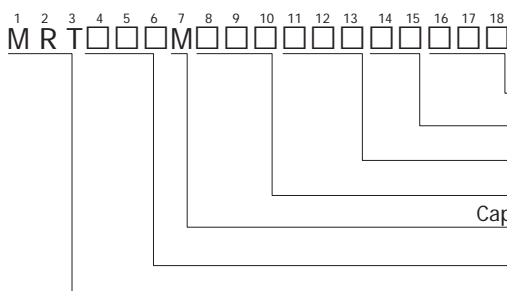


Unit(mm)

	8	10	12.5	16	18	20	22
ØD	8	10	12.5	16	18	20	22
Ød	0.6	0.6	0.6	0.8	0.8	0.8	0.8
F	3.5	5.0	5.0	7.5	7.5	7.5	10.0
ØD'	ØD+0.5 max.						
L'	L+1.5 max		L+2.0 max				

- Printed gold color letter on PET dark green sleeve

Code numbering system



- Taping, Cutting
- Terminal type
- Size (5X11: D11)
- Capacitance
- Capacitance tolerance(M:±20%, K:±10%, V :-10~20%)
- Rated voltage(ex. 160V→160)
- Series name

Ø8	F
Ø10	G
Ø12.5	X
Ø16	J
Ø18	K
Ø20	L
Ø22	M



MRT series

Standard Ratings

Note1) Ripple current = mArms/105°C, 120Hz

WV (Vdc)	Cap (uF)	Size ØxL(mm)	Tan δ	Ripple ¹⁾	Code No
160	22	10 x 20	0.20	192	MRT160□220G20CS□□□
	33	10 x 20	0.20	236	MRT160□330G20CS□□□
	47	12.5 x 20	0.20	340	MRT160□470X20CS□□□
	68	12.5 x 25	0.20	436	MRT160□680X25CS□□□
	100	16 x 25	0.20	554	MRT160□101J25CS□□□
	150	16 x 31.5	0.20	738	MRT160□151J32CS□□□
	220	16 x 31.5	0.20	920	MRT160□221J32CS□□□
	330	16 x 35.5	0.20	1,210	MRT160□331J36CS□□□
200	22	10 x 20	0.20	155	MRT200□220G20CS□□□
	33	10 x 20	0.20	236	MRT200□330G20CS□□□
	47	12.5 x 20	0.20	340	MRT200□470X20CS□□□
	68	10 x 33	0.20	409	MRT200□680G33CS□□□
		12.5 x 35	0.20	409	MRT200□680X25CS□□□
	100	16 x 25	0.20	548	MRT200□101J25CS□□□
	150	16 x 31.5	0.20	703	MRT200□151J32CS□□□
	220	18 x 31.5	0.20	906	MRT200□221K32CS□□□
250	10	10 x 20	0.20	130	MRT250□100G20CS□□□
	22	12.5 x 20	0.20	214	MRT250□220X20CS□□□
	33	12.5 x 25	0.20	285	MRT250□330X25CS□□□
	47	12.5 x 25	0.20	340	MRT250□470X25CS□□□
	56	10 x 33	0.20	350	MRT250□560G33CS□□□
	68	16 x 25	0.20	452	MRT250□680J25CS□□□
	100	16 x 31.5	0.20	591	MRT250□101J32CS□□□
	150	18 x 25	0.20	700	MRT250□151K25CS□□□
	220	18 x 31.5	0.20	850	MRT250□221K32CS□□□
330	20 x 40	0.20	1,195	MRT250□331L40CS□□□	
350	10	10 x 20	0.20	126	MRT350□100G20CS□□□
	22	12.5 x 20	0.20	207	MRT350□220X20CS□□□
	33	16 x 20	0.20	284	MRT350□330J20CS□□□
	47	16 x 25	0.20	364	MRT350□470J25CS□□□
	68	16 x 31.5	0.20	472	MRT350□680J32CS□□□
	100	18 x 31.5	0.20	591	MRT350□101K32CS□□□
	150	18 x 40	0.20	760	MRT350□151K40CS□□□
220	22 x 45	0.20	970	MRT350□221M45CS□□□	
400	2.2	8 x 11.5	0.20	27	MRT400□2R2F12CS□□□
	3.3	8 x 11.5	0.20	33	MRT400□3R3F11CS□□□
	4.7	8 x 11.5	0.20	39	MRT400□4R7F11CS□□□
	6.8	8 x 15	0.20	63	MRT400□6R8F15CS□□□
	8.2	8 x 20	0.20	75	MRT400□8R2F20CS□□□
	10	10 x 20	0.20	125	MRT400□100G20CS□□□
	15	10 x 20	0.20	154	MRT400□150G20CS□□□
	22	12.5 x 25	0.20	225	MRT400□220X25CS□□□
	33	16 x 20	0.20	284	MRT400□330J20CS□□□
	47	16 x 25	0.20	364	MRT400□470J25CS□□□
	68	16 x 31.5	0.20	472	MRT400□680J32CS□□□
	82	18 x 31.5	0.20	536	MRT400□820K32CS□□□
	100	18 x 35.5	0.20	611	MRT400□101K36CS□□□
	120	18 x 40	0.20	680	MRT400□121K40CS□□□
	150	18 x 40	0.20	760	MRT400□151K40CS□□□
	180	20 x 40	0.20	855	MRT400□181L40CS□□□
	220	22 x 45	0.20	996	MRT400□221M45CS□□□

WV (Vdc)	Cap (uF)	Size ØxL(mm)	Tan δ	Ripple ¹⁾	Code No
450	3.3	10 x 16	0.24	63	MRT450□3R3G16CS□□□
	4.7	10 x 16	0.24	74	MRT450□4R7G16CS□□□
	6.8	10 x 20	0.24	96	MRT450□6R8G20CS□□□
	8.2	10 x 20	0.24	106	MRT450□8R2G20CS□□□
	10	10 x 20	0.24	108	MRT450□100G20CS□□□
		12.5 x 20	0.24	114	MRT450□100X20CS□□□
	22	16 x 25	0.24	241	MRT450□220J25CS□□□
	33	12.5 x 30	0.24	315	MRT450□330X30CS□□□
		16 x 31.5	0.24	319	MRT450□330J32CS□□□
	47	18 x 25	0.24	368	MRT450□470K25CS□□□
	68	18 x 25	0.24	435	MRT450□680K25CS□□□
		18 x 31.5	0.24	473	MRT450□680K32CS□□□
	82	18 x 35.5	0.24	537	MRT450□820K36CS□□□
	100	18 x 40	0.24	602	MRT450□101K40CS□□□
120	18 x 45	0.24	659	MRT450□121K45CS□□□	
150	20 x 40	0.24	757	MRT450□151L40CS□□□	
180	22 x 45	0.24	892	MRT450□181M45CS□□□	
500	10	12.5 x 20	0.24	120	MRT500□100X20CS□□□
	22	16 x 25	0.24	228	MRT500□220J25CS□□□
	33	18 x 25	0.24	260	MRT500□330K25CS□□□
	47	18 x 31.5	0.24	393	MRT500□470K32CS□□□
	68	18 x 35.5	0.24	489	MRT500□680K36CS□□□

Rated ripple current multipliers

Frequency(Hz)	120	1K	10K	50K	100K
Factor	1.00	1.25	1.50	1.60	1.75