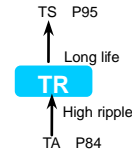


TR SERIES

- High Ripple
- Ripple Load
- RoHS

- Compared with the TA series, ripple current is increased by 20~30%.
- Endurance with ripple current: 3000 hours at 85°C.
- Applications: Frequency converters and Uninterruptible power supplies.

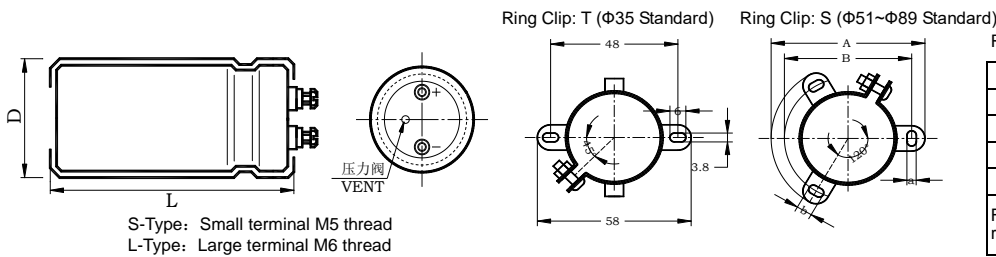


◆ SPECIFICATIONS

Items	Characteristics						
Operating Temperature Range	-40~+85°C						
Rated Working Voltage Range	400~450V						
Capacitance Range	1000~15000μ F						
Capacitance Tolerance	±20% (20°C, 120Hz)						
Dissipation Factor (MAX) 20°C, 120Hz	<table border="1"> <tr> <td>U_R(V)</td> <td>400</td> <td>450</td> </tr> <tr> <td>tanδ</td> <td colspan="2">0.15</td> </tr> </table>	U _R (V)	400	450	tanδ	0.15	
	U _R (V)	400	450				
tanδ	0.15						
Leakage Current (MAX)	I=0.01C _R U _R or 5mA whichever is minimum. (at 20°C, After 5 minutes application of rated voltage) I=Leakage Current (μA) U _R =Rated Voltage (V) C _R =Rated Capacitance (μF)						

	Useful Life		Load Life	Endurance Test	Shelf Life
Life Time	6000h	>65000h	3000h	3000h	1000h
Leakage Current	≤Specified value		≤Specified value	≤Specified value	≤Specified value
tanδ Change	≤300% of specified value		≤200% of specified value	≤ 130% of specified value	≤ 150% of specified value
Capacitance Change	Within ±30% of initial value		Within ±20% of initial value	Within ±10% of initial value	Within ±15% of initial value
Condition Applied Voltage Applied Ripple Current Applied Temperature Failure Rate Level	U _R I _R 85°C ≤1% Failure rate	U _R 1.2×I _R 40°C ≤1% Failure rate	U _R I _R 85°C 0%	U _R I _R =0 85°C 0%	U _R =0 I _R =0 85°C 0% Back up to 20 °C and placed more than 24 hours. U _R to be applied for 60 min before measurement..

- ◆ Dimensions
- Terminal Code



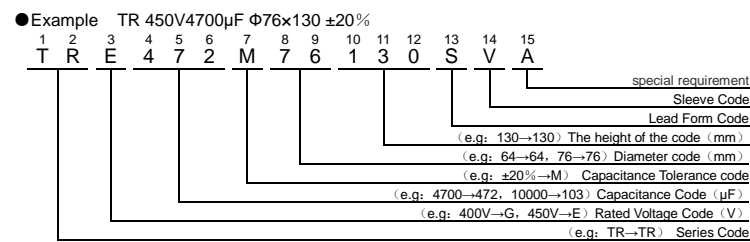
Ring Clip Dimensions:

ΦD	A	B	a	b
51	73.0	63.5	4.5	7
64	85.1	76.2	4.5	7
76	98.4	88.9	4.5	7
89	111.1	101.6	4.5	7

For detailed dimension & tolerance, please refer to P90

- Please consult to us for the terminal type not displayed in content.

◆ PART NUMBER SYSTEM



◆ Rated Ripple Current Multiplies

● Frequency coefficient

Frequency (Hz)	50(60)	100(120)	300	1k	≥10k
Coefficient	0.80	1.00	1.10	1.25	1.50

● Temperature coefficient

Temperature (°C)	+40	+60	+70	+85
Coefficient	2.70	2.00	1.70	1.00

TR SERIES

◆ Standard Ratings

WV _{DC} (Surge Voltage) (V)	Cap (μ F)	Size D×L (mm)	tan δ 20℃120Hz	Ripple Current 85℃120Hz (Arms)	Catalog Part Number
400 (450)	1000	51×80	0.15	4.8	TRG102M51080□VA
	1200	51×80	0.15	5.1	TRG122M51080□VA
	1500	51×95	0.15	6.3	TRG152M51095□VA
	1800	51×95	0.15	7.0	TRG182M51095□VA
	2200	51×115	0.15	8.0	TRG222M51115□VA
	2700	64×95	0.15	9.7	TRG272M64095□VA
	3300	64×115	0.15	11.4	TRG332M64115□VA
	3900	64×130	0.15	12.7	TRG392M64130□VA
	4700	76×115	0.15	14.6	TRG472M76115□VA
	5600	76×130	0.15	16.8	TRG562M76130□VA
	6800	76×155	0.15	20.2	TRG682M76155□VA
	8200	89×157	0.15	22.5	TRG822M89157□VA
	10000	89×157	0.15	24.9	TRG103M89157□VA
	12000	89×195	0.15	28.5	TRG123M89195□VA
15000	89×235	0.15	33.1	TRG153M89235□VA	

WV _{DC} (Surge Voltage) (V)	Cap (μ F)	Size D×L (mm)	tan δ 20℃120Hz	Ripple Current 85℃120Hz (Arms)	Catalog Part Number
450 (500)	1000	51×80	0.15	4.9	TRE102M51080□VA
	1200	51×95	0.15	5.4	TRE122M51095□VA
	1500	51×115	0.15	7.2	TRE152M51115□VA
	1800	51×130	0.15	8.3	TRE182M51130□VA
	2200	64×95	0.15	9.0	TRE222M64095□VA
	2700	64×115	0.15	10.4	TRE272M64115□VA
	3300	64×130	0.15	12.1	TRE332M64130□VA
	3900	76×115	0.15	13.4	TRE392M76115□VA
	4700	76×130	0.15	15.5	TRE472M76130□VA
	5600	76×155	0.15	18.3	TRE562M76155□VA
	6800	89×157	0.15	20.9	TRE682M89157□VA
	8200	89×157	0.15	23.0	TRE822M89157□VA
	10000	89×195	0.15	27.2	TRE103M89195□VA
	12000	89×235	0.15	32.5	TRE123M89235□VA

*□Enter the appropriate terminal code

*Please ask for advice for other sizes.

*Aluminum electrolytic capacitor will emit heat when ripple current is applied, the performance will deteriorate when temp. rises. the useful life will be half of original life when temp rises every 5℃. Please reduce the ripple current when using capacitor.