

Toroidal Transformers

General Purpose



**RoHS
Compliant**



Primary

Dual primary winding for connection in series or parallel only
 Input Voltage : 115 or 230V $\pm 10\%$ 50/60Hz.
 DC Resistance : 2x 2.13 Ω to 79.1 Ω $\pm 15\%$ @ 20°C
 Magnetising Current : 2.5mA to 47mA approx. @ 230V 50Hz
 (5mA to 94mA approx. @ 115V 50Hz)

Termination

All leads Tri-Rated UL1015 style cable rated 600V /105°C VW-1
 Primary leads double insulated with PVC sleeving for a minimum of 20mm.
 Lead lengths ± 5 mm approx. All leads ends tinned to 6mm.
 Pri/Sec leads 0°

Temperature Class

Winding Wire : Class H (180°C)
 Insulation System : Class B (130°C)
 Leadout Insulation : Class A (105°C)
 Overall : Class A (105°C)

Standards

Designed and manufactured in accordance with : EN61558-1 / EN61558-1/A1 / EN61558-2-4 or EN61558-2-6
 UL recognised under family approval E115159 to UL1411, UL60601-1, UL60065-1

Losses

Part Number	Iron Loss	Copper Loss	Efficiency	Temperature Rise	Ambient Rated
15VA General Purpose Toroidal Transformers					
MCTA015/06	0.25 Watts Approx.	2.5 Watts Approx.	84% typical	27°C Approx.	40°C
MCTA015/09					
MCTA015/12					
MCTA015/15					
MCTA015/18					
30VA General Purpose Toroidal Transformers					
MCTA030/06	0.37 Watts Approx.	4.9 Watts Approx.	85% typical	42°C Approx.	40°C
MCTA030/09					
MCTA030/12					
MCTA030/15					
MCTA030/18					
MCTA030/25					
50VA General Purpose Toroidal Transformers					
MCTA050/06	0.46 Watts Approx.	7.3 Watts Approx.	87% typical	50°C Approx.	40°C
MCTA050/09					
MCTA050/12					
MCTA050/15					
MCTA050/18					



Toroidal Transformers

General Purpose



Part Number	Iron Loss	Copper Loss	Efficiency	Temperature Rise	Ambient Rated
MCTA050/25	0.46 Watts Approx.	7.3 Watts Approx.	87% typical	50°C Approx.	40°C
MCTA050/55					
60VA General Purpose Toroidal Transformers					
MCTA060/09	0.57 Watts Approx.	7.9 Watts Approx.	88% typical	47°C Approx.	40°C
MCTA060/12					
MCTA060/15					
MCTA060/18					
MCTA060/25					
80VA General Purpose Toroidal Transformers					
MCTA080/09	0.58 Watts Approx.	9.5 Watts Approx.	89% typical	52°C Approx.	40°C
MCTA080/12					
MCTA080/15					
MCTA080/18					
MCTA080/25					
MCTA080/55					
100VA General Purpose Toroidal Transformers					
MCTA100/12	0.85 Watts Approx.	10.3 Watts Approx.	90% typical	52°C Approx.	40°C
MCTA100/15					
MCTA100/18					
MCTA100/25					
120VA General Purpose Toroidal Transformers					
MCTA120/12	0.98 Watts Approx.	11.4 Watts Approx.	91% typical	54°C Approx.	40°C
MCTA120/15					
MCTA120/18					
MCTA120/25					
MCTA120/55					
160VA General Purpose Toroidal Transformers					
MCTA160/12	1.12 Watts Approx.	13.9 Watts Approx.	91% typical	54°C Approx.	40°C
MCTA160/15					
MCTA160/18					
MCTA160/25					
MCTA160/30					
MCTA160/55					
225VA General Purpose Toroidal Transformers					
MCTA225/12	1.49 Watts Approx.	16.9 Watts Approx.	92% typical	56°C Approx.	40°C
MCTA225/15					
MCTA225/18					

Toroidal Transformers

General Purpose



Part Number	Iron Loss	Copper Loss	Efficiency	Temperature Rise	Ambient Rated
MCTA225/25	1.49 Watts Approx.	16.9 Watts Approx.	92% typical	56°C Approx.	40°C
MCTA225/30					
MCTA225/55					
250VA General Purpose Toroidal Transformers					
MCTA250/12	1.62 Watts Approx.	17.4 Watts Approx.	93% typical	55°C Approx.	40°C
MCTA250/18					
MCTA250/25					
MCTA250/30					
MCTA250/35					
MCTA250/40					
MCTA250/45					
MCTA250/50					
300VA General Purpose Toroidal Transformers					
MCTA300/25	1.8 Watts Approx.	19.8 Watts Approx.	93% typical	56°C Approx.	40°C
MCTA300/30					
MCTA300/35					
MCTA300/55					
1,000VA General Purpose Toroidal Transformers					
MCTA1000/40	4.49 Watts Approx.	39.1 Watts Approx.	96% typical	60°C Approx.	40°C
MCTA1000/50					
MCTA1000/55					

Supplied with

15VA General Purpose Toroidal Transformers	
1x 50mm dished mounting plate 2x 50mm neoprene mounting pads 1x M5 x 40mm screw, nut & washer	MCTA015/06
	MCTA015/09
	MCTA015/12
	MCTA015/15
	MCTA015/18
30VA General Purpose Toroidal Transformers	
1x 50mm dished mounting plate 2x 50mm neoprene mounting pads 1x M5 x 40mm screw, nut & washer	MCTA030/06
	MCTA030/09
	MCTA030/12
	MCTA030/15
	MCTA030/18
MCTA030/25	

50VA General Purpose Toroidal Transformers	
1x 50mm dished mounting plate 2x 50mm neoprene mounting pads 1x M5 x 40mm screw, nut & washer	MCTA050/06
	MCTA050/09
	MCTA050/12
	MCTA050/15
	MCTA050/18
	MCTA050/25
MCTA050/55	
60VA General Purpose Toroidal Transformers	
1x 70mm dished mounting plate 2x 70mm neoprene mounting pads 1x M6 x 50mm screw, nut & washer	MCTA060/09
	MCTA060/12
	MCTA060/15
	MCTA060/18
	MCTA060/25

Toroidal Transformers

General Purpose



80VA General Purpose Toroidal Transformers	
1x 70mm dished mounting plate 2x 70mm neoprene mounting pads 1x M6 x 50mm screw, nut & washer	MCTA080/09
	MCTA080/12
	MCTA080/15
	MCTA080/18
	MCTA080/25
	MCTA080/55
100VA General Purpose Toroidal Transformers	
1x 70mm dished mounting plate 2x 70mm neoprene mounting pads 1x M6 x 50mm screw, nut & washer	MCTA100/12
	MCTA100/15
	MCTA100/18
	MCTA100/25
120VA General Purpose Toroidal Transformers	
1x 70mm dished mounting plate 2x 70mm neoprene mounting pads 1x M6 x 50mm screw, nut & washer	MCTA120/12
	MCTA120/15
	MCTA120/18
	MCTA120/25
	MCTA120/55
160VA General Purpose Toroidal Transformers	
1x 90mm dished mounting plate 2x 90mm neoprene mounting pads 1x M6 x 60mm screw, nut & washer	MCTA160/12
	MCTA160/15
	MCTA160/18
	MCTA160/25
	MCTA160/30
	MCTA160/55

225VA General Purpose Toroidal Transformers	
1x 90mm dished mounting plate 2x 90mm neoprene mounting pads 1x M6 x 60mm screw, nut & washer	MCTA225/12
	MCTA225/15
	MCTA225/18
	MCTA225/25
	MCTA225/30
	MCTA225/55
250VA General Purpose Toroidal Transformers	
1x 90mm dished mounting plate 2x 90mm neoprene mounting pads 1x M6 x 60mm screw, nut & washer	MCTA250/12
	MCTA250/18
	MCTA250/25
	MCTA250/30
	MCTA250/35
	MCTA250/40
	MCTA250/45
	MCTA250/50
300VA General Purpose Toroidal Transformers	
1x 90mm dished mounting plate 2x 90mm neoprene mounting pads 1x M6 x 60mm screw, nut & washer	MCTA300/25
	MCTA300/30
	MCTA300/35
	MCTA300/55
1,000VA General Purpose Toroidal Transformers	
1x 145mm dished mounting plate 2x 148mm neoprene mounting pads 1x M8 x 80mm screw, nut & washer	MCTA1000/40
	MCTA1000/50
	MCTA1000/55

Specification Table

Part Number	On Load Sec V	Rated Amps per Sec	Off load Sec V	Sec Flex Gauge	Sec Ω @ 20°C	Diameter Allow Extra 5mm	Height Over Leadout Area	Weight
15VA General Purpose Toroidal Transformers								
MCTA015/06	6	1.25	6.9	22 AWG	0.46	64.5mm	30.5mm	0.33kg
MCTA015/09	9	0.83	10.4		1.08			
MCTA015/12	12	0.63	13.9		1.76			
MCTA015/15	15	0.5	17.3		2.78			
MCTA015/18	18	0.42	20.9		4.21			
30VA General Purpose Toroidal Transformers								
MCTA030/06	6	2.5	6.9	22 AWG	0.21	73mm	31mm	0.48kg
MCTA030/09	9	1.67	10.3		0.44			
MCTA030/12	12	1.25	13.9		0.9			

www.element14.com
www.farnell.com
www.newark.com



Toroidal Transformers

General Purpose



Part Number	On Load Sec V	Rated Amps per Sec	Off load Sec V	Sec Flex Gauge	Sec Ω @ 20°C	Diameter Allow Extra 5mm	Height Over Leadout Area	Weight
MCTA030/15	15	1	17.4	22 AWG	1.44	73mm	31mm	0.48kg
MCTA030/18	18	0.83	20.9		2.13			
MCTA030/25	25	0.6	28.8		3.74			
50VA General Purpose Toroidal Transformers								
MCTA050/06	6	4.17	6.8	22 AWG	0.11	81mm	34.5mm	0.65kg
MCTA050/09	9	2.78	10.2		0.23			
MCTA050/12	12	2.08	13.6		0.44			
MCTA050/15	15	1.67	17		0.69			
MCTA050/18	18	1.39	20.5		5.4			
MCTA050/25	25	1	28.4		1.83			
MCTA050/55	55	0.45	62.3		8.93			
60VA General Purpose Toroidal Transformers								
MCTA060/09	9	3.33	10.1	20 AWG	0.19	91.5mm	39mm	0.78kg
MCTA060/12	12	2.5	13.5	22 AWG	0.36			
MCTA060/15	15	2	16.9		0.51			
MCTA060/18	18	1.67	20.2		0.77			
MCTA060/25	25	1.2	28		1.36			
80VA General Purpose Toroidal Transformers								
MCTA080/09	9	4.44	10.1	20 AWG	0.12	87.5mm	39mm	0.96kg
MCTA080/12	12	3.33	13.3	22 AWG	0.23			
MCTA080/15	15	2.67	16.7		0.35			
MCTA080/18	18	2.22	20.1		0.53			
MCTA080/25	25	1.6	27.7		0.93			
MCTA080/55	55	0.73	60.7		4.15			
100VA General Purpose Toroidal Transformers								
MCTA100/12	12	4.17	13.1	20 AWG	0.15	91mm	46mm	1.13kg
MCTA100/15	15	3.33	16.3		0.23			
MCTA100/18	18	2.78	19.7		0.35			
MCTA100/25	25	2	27.4		0.68			
120VA General Purpose Toroidal Transformers								
MCTA120/12	12	5	13.2	18 AWG	0.12	95mm	47mm	1.32kg
MCTA120/15	15	4	16.4	20 AWG	0.19			
MCTA120/18	18	3.33	19.6		0.29			
MCTA120/25	25	2.4	27.3		0.55			
MCTA120/55	55	1.09	59.5		2.18			

Toroidal Transformers

General Purpose



Part Number	On Load Sec V	Rated Amps per Sec	Off load Sec V	Sec Flex Gauge	Sec Ω @ 20°C	Diameter Allow Extra 5mm	Height Over Leadout Area	Weight
160VA General Purpose Toroidal Transformers								
MCTA160/12	12	6.67	13	18 AWG	0.08	105mm	47mm	1.64kg
MCTA160/15	15	5.33	16.4		0.13			
MCTA160/18	18	4.44	19.6	20 AWG	0.17			
MCTA160/25	25	3.2	27		0.33			
MCTA160/30	30	2.67	32.5		0.50			
MCTA160/55	55	1.45	59.5		1.59			
225VA General Purpose Toroidal Transformers								
MCTA225/12	12	9.38	12.7	16 AWG	0.05	110.5mm	51mm	2.20kg
MCTA225/15	15	7.5	16.1		0.08			
MCTA225/18	18	6.25	19.2	18 AWG	0.12			
MCTA225/25	25	4.5	26.7		0.21			
MCTA225/30	30	3.75	32.2	20 AWG	0.32			
MCTA225/55	55	2.05	58.7		1			
250VA General Purpose Toroidal Transformers								
MCTA250/12	12	10.42	12.8	16 AWG	0.04	119.5mm	53.5mm	2.38kg
MCTA250/18	18	6.94	19.2		0.09			
MCTA250/25	25	5	26.7	18 AWG	0.16			
MCTA250/30	30	4.17	31.9		0.24			
MCTA250/35	35	3.57	37.2	20 AWG	0.32			
MCTA250/40	40	3.13	42.5		0.4			
MCTA250/45	45	2.78	48.1		0.51			
MCTA250/50	50	2.5	53.3		0.63			
300VA General Purpose Toroidal Transformers								
MCTA300/25	25	6	26.6	18 AWG	0.14	125.5mm	54mm	2.83kg
MCTA300/30	30	5	31.9		0.19			
MCTA300/35	35	4.29	37.1		0.28			
MCTA300/55	55	2.73	58.5	20 AWG	0.7			
1,000VA General Purpose Toroidal Transformers								
MCTA1000/40	40	12.5	41.5	14 AWG	0.06	167mm	70.5mm	7.48kg
MCTA1000/50	50	10	52	16 AWG	0.1			
MCTA1000/55	55	9.09	56.9		0.14			

Part Number Table

Description	Part Number
Transformer, Toroidal, 2 × 6V, 15VA	MCTA015/06
Transformer, Toroidal, 2 × 9V, 15VA	MCTA015/09

Description	Part Number
Transformer, Toroidal, 2 × 12V, 15VA	MCTA015/12
Transformer, Toroidal, 2 × 15V, 15VA	MCTA015/15

www.element14.com
www.farnell.com
www.newark.com



Toroidal Transformers

General Purpose



Description	Part Number
Transformer, Toroidal, 2 × 18V, 15VA	MCTA015/18
Transformer, Toroidal, 2 × 6V, 30VA	MCTA030/06
Transformer, Toroidal, 2 × 9V, 30VA	MCTA030/09
Transformer, Toroidal, 2 × 12V, 30VA	MCTA030/12
Transformer, Toroidal, 2 × 15V, 30VA	MCTA030/15
Transformer, Toroidal, 2 × 18V, 30VA	MCTA030/18
Transformer, Toroidal, 2 × 25V, 30VA	MCTA030/25
Transformer, Toroidal, 2 × 6V, 50VA	MCTA050/06
Transformer, Toroidal, 2 × 9V, 50VA	MCTA050/09
Transformer, Toroidal, 2 × 12V, 50VA	MCTA050/12
Transformer, Toroidal, 2 × 15V, 50VA	MCTA050/15
Transformer, Toroidal, 2 × 18V, 50VA	MCTA050/18
Transformer, Toroidal, 2 × 25V, 50VA	MCTA050/25
Transformer, Toroidal, 2 × 55V, 50VA	MCTA050/55
Transformer, Toroidal, 2 × 9V, 60VA	MCTA060/09
Transformer, Toroidal, 2 × 12V, 60VA	MCTA060/12
Transformer, Toroidal, 2 × 15V, 60VA	MCTA060/15
Transformer, Toroidal, 2 × 18V, 60VA	MCTA060/18
Transformer, Toroidal, 2 × 25V, 60VA	MCTA060/25
Transformer, Toroidal, 2 × 9V, 80VA	MCTA080/09
Transformer, Toroidal, 2 × 12V, 80VA	MCTA080/12
Transformer, Toroidal, 2 × 15V, 80VA	MCTA080/15
Transformer, Toroidal, 2 × 18V, 80VA	MCTA080/18
Transformer, Toroidal, 2 × 25V, 80VA	MCTA080/25
Transformer, Toroidal, 2 × 55V, 80VA	MCTA080/55
Transformer, Toroidal, 2 × 12V, 100VA	MCTA100/12
Transformer, Toroidal, 2 × 15V, 100VA	MCTA100/15
Transformer, Toroidal, 2 × 18V, 100VA	MCTA100/18
Transformer, Toroidal, 2 × 25V, 100VA	MCTA100/25
Transformer, Toroidal, 2 × 12V, 120VA	MCTA120/12
Transformer, Toroidal, 2 × 15V, 120VA	MCTA120/15

Description	Part Number
Transformer, Toroidal, 2 × 18V, 120VA	MCTA120/18
Transformer, Toroidal, 2 × 25V, 120VA	MCTA120/25
Transformer, Toroidal, 2 × 55V, 120VA	MCTA120/55
Transformer, Toroidal, 2 × 12V, 160VA	MCTA160/12
Transformer, Toroidal, 2 × 15V, 160VA	MCTA160/15
Transformer, Toroidal, 2 × 18V, 160VA	MCTA160/18
Transformer, Toroidal, 2 × 25V, 160VA	MCTA160/25
Transformer, Toroidal, 2 × 30V, 160VA	MCTA160/30
Transformer, Toroidal, 2 × 55V, 160VA	MCTA160/55
Transformer, Toroidal, 2 × 12V, 225VA	MCTA225/12
Transformer, Toroidal, 2 × 15V, 225VA	MCTA225/15
Transformer, Toroidal, 2 × 18V, 225VA	MCTA225/18
Transformer, Toroidal, 2 × 25V, 225VA	MCTA225/25
Transformer, Toroidal, 2 × 30V, 225VA	MCTA225/30
Transformer, Toroidal, 2 × 55V, 225VA	MCTA225/55
Transformer, Toroidal, 2 × 12V, 250VA	MCTA250/12
Transformer, Toroidal, 2 × 18V, 250VA	MCTA250/18
Transformer, Toroidal, 2 × 25V, 250VA	MCTA250/25
Transformer, Toroidal, 2 × 30V, 250VA	MCTA250/30
Transformer, Toroidal, 2 × 35V, 250VA	MCTA250/35
Transformer, Toroidal, 2 × 40V, 250VA	MCTA250/40
Transformer, Toroidal, 2 × 45V, 250VA	MCTA250/45
Transformer, Toroidal, 2 × 50V, 250VA	MCTA250/50
Transformer, Toroidal, 2 × 25V, 300VA	MCTA300/25
Transformer, Toroidal, 2 × 30V, 300VA	MCTA300/30
Transformer, Toroidal, 2 × 35V, 300VA	MCTA300/35
Transformer, Toroidal, 2 × 55V, 300VA	MCTA300/55
Transformer, Toroidal, 2 × 40V, 1000VA	MCTA1000/40
Transformer, Toroidal, 2 × 50V, 1000VA	MCTA1000/50
Transformer, Toroidal, 2 × 55V, 1000VA	MCTA1000/55

Important Notice : This data sheet and its contents (the "Information") belong to the members of the Premier Farnell group of companies (the "Group") or are licensed to it. No licence is granted for the use of it other than for information purposes in connection with the products to which it relates. No licence of any intellectual property rights is granted. The Information is subject to change without notice and replaces all data sheets previously supplied. The Information supplied is believed to be accurate but the Group assumes no responsibility for its accuracy or completeness, any error in or omission from it or for any use made of it. Users of this data sheet should check for themselves the Information and the suitability of the products for their purpose and not make any assumptions based on information included or omitted. Liability for loss or damage resulting from any reliance on the Information or use of it (including liability resulting from negligence or where the Group was aware of the possibility of such loss or damage arising) is excluded. This will not operate to limit or restrict the Group's liability for death or personal injury resulting from its negligence. Multicomp is the registered trademark of the Group. © Premier Farnell Limited 2016.