imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

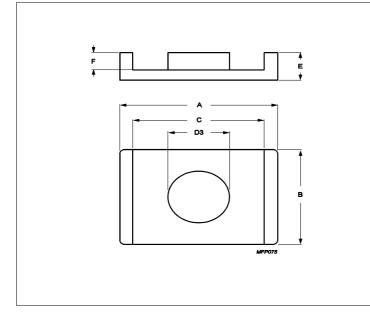
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Product specifications



Core **ER51/10/38**



	Effective parameters						
	Parameter		Unit				
Σ(I/A)	core factor (C1)	0.209	mm⁻¹				
Ve	effective volume	25800	mm³				
Le	effective length	73.5	mm				
Ae	effective area	351	mm²				
Amin	minimum area	314	mm²				
m	ER51/10/38	≈ 74.7	g/pcs				

Dimensions for product: ER51/10/38							
	Nom	Tol +	Tol -	Max	Min	Unit	
Α	51.00	1.00	1.00	52.00	50.00	mm	
В	38.10	0.70	0.70	38.80	37.40	mm	
С	41.80	0.80	0.80	42.60	41.00	mm	
D3	20.00	0.40	0.40	20.40	19.60	mm	
E	10.16	0.15	0.15	10.31	10.01	mm	
F	4.95	0.15	0.15	5.10	4.80	mm	

	Inductance factor						
Material	Value	Tol +	Tol -	Unit			
3C92	8100	25%	25%	nH/turns ²			
3C95	13000	25%	25%	nH/turns ²			
3C96	9700	25%	25%	nH/turns ²			
3C97	13000	25%	25%	nH/turns ²			
3F36	6500	25%	25%	nH/turns ²			
3F4	4800	25%	25%	nH/turns ²			

Power loss: 3C92					
	Measuring conditions Max Unit				
100 kHz	200 mT	100 °C	13.000	W/set	
		Powe	r loss: 3C95		
I	Measuring conditions Max Unit				
100 kHz	200 mT	100 °C	12.000	W/set	
100 kHz	200 mT	25 °C	13.000	W/set	



Core **ER51/10/38**

Power loss: 3C96					
Measuring conditions		Max	Unit		
100 kHz	200 mT	100 °C	12.000	W/set	
400 kHz	50 mT	100 °C	5.000	W/set	
		Powe	r loss: 3C97		
	Measuring condition	S	Max	Unit	
100 kHz	200 mT	60 °C	13.000	W/set	
100 kHz	200 mT	120 °C	12.000	W/set	
100 kHz	200 mT	140 °C	15.000	W/set	
		Powe	r loss: 3F36		
Measuring conditions		Max	Unit		
500 kHz	50 mT	100 °C	3.900	W/set	
500 kHz	100 mT	100 °C	30.000	W/set	
Power loss: 3F4					
Measuring conditions			Мах	Unit	
1000 kHz	30 mT	100 °C	7.700	W/set	
3000 kHz	10 mT	100 °C	13.000	W/set	

	Bsat						
	Measuring conditions		Material	Min	Unit		
25 kHz	250 A/m	100 °C	3C92	370	mT		
25 kHz	250 A/m	100 °C	3C95	330	mT		
25 kHz	250 A/m	100 °C	3C96	340	mT		
25 kHz	250 A/m	100 °C	3C97	330	mT		
25 kHz	250 A/m	100 °C	3F36	340	mT		
25 kHz	250 A/m	100 °C	3F4	330	mT		