

Introduction of micro transformer used for Smart Sockets

Smart Sockets usually use micro current transformer ZMCT103C, The commonly used method is Parallel half-wave rectifier diodes, resistors and electrolytic capacitors. Due to different voltage comparators, resistor value and capacitor capacitance value each customer use is slightly different, Attached to typical test data:

Model	ZMCT103C				
	Input Current(A)	C=4.7uF R=3.3KΩ	Output voltage(DC,V) R=4.7KΩ	Input Current(A)	C=4.7uF R=1KΩ
1.0	1.14	1.638	1.0	0.447	2.10
2.0	1.70	2.320	2.0	0.873	2.86
3.0	2.08	2.768	3.0	1.162	3.40
4.0	2.36	3.120	4.0	1.364	3.83
5.0	2.61	3.411	5.0	1.524	4.19
6.0	2.82	3.654	6.0	1.160	4.55
7.0	2.99	3.900	7.5	1.825	4.96
8.0	3.18	4.080	9.0	1.974	5.31
9.0	3.33	4.265	10.0	2.06	5.54
10.0	3.47	4.437	15.0	2.41	6.41
11.0	3.60	4.596	18.0	2.58	6.84
12.0	3.72	4.742	20.0	2.68	7.08
13.0	3.83	4.883			
14.0	3.94	5.018			
15.0	4.04	5.146			
18.0	4.33	5.494			
20.0	4.50	5.7			

What's more, some other customers also use ZMCT118F. Its features : feedthrough, the hole diameter 7.5mm, higher output voltage, Slightly larger volume.