

# MATERIAL DATA SHEET

Material #	<b>CZRFR &amp; CZRF series(1005) (Halogen Free)</b>	
Product Line	Integrated Passive & Active Devices	
Date	2011/10/5	
Rev.	F	

## COMPONENT DETAILS

No.	Construction element	Material group	Material weight (mg)	Material	CAS if applicable	Average mass (%)	Sum(%)	Traces
1	FR-4 Board	Substrate/ Terminal	2.716	Copper	7440-50-8	27.62%	41.47	
				Nickel	7440-02-0	4.244%		
				Gold	7440-57-5	0.140%		
				Continuous Filament Fiber Glass	65997-17-3	68.00%		
2	Wafer	Diode	0.057	Silicon	7440-21-3	94.64%	0.87	
				Aluminum	7429-90-5	0.23%		
				Titanium	7440-32-6	0.04%		
				Gold	7440-57-5	5.09%		
3	Al wire	Conductor	0.002	Aluminum	7429-90-5	99.00%	0.03	
				Silicon	7440-21-3	1.00%		
4	Silver paste	Welding	0.012	Epoxy Resin A type	25068-38-6	4~15%	0.18	
				Modified Epoxy Resin	29690-82-2	1~10%		
				Silver	7440-22-4	76~85%		
				Imidazole	827-43-0	1~4%		
				Amide	461-58-5	1~4%		
5	Molding Compound	Outer	3.762	Silica	60676-86-0	70~90%	57.44	
				Epoxy Resin	29690-82-2	6~16%		
				Phenolic Resin	9003-35-4	5~15%		
				Carbon Black	1333-86-4	0.1~1%		
Total weight			6.549					