

MATERIAL DATA SHEET



SMD Diodes Specialist

Material #	SOT-23 series	
Product Line	SOT-23	
Date	2008/11/2	
Rev. date	A	

COMPONENT DETILS

No.	Construction element	Material group	Material weight (mg)	Material	CAS if applicable	Average mass (%)	Sum(%)	Traces
1	Lead Frame	Lead Frame	1.878	Nickel	7440-02-0	40%~42%	24.02%	
				Manganese	7439-96-5	<0.8%		
				Cobalt	7740-48-4	<0.5%		
				Silicon	7440-21-3	<0.3%		
				Chromium	7440-47-3	<0.1%		
				Copper	7440-50-8	<0.1%		
				Carbon	7740-44-0	<0.02%		
				Iron	7439-89-6	Bal.		
				Silver	7740-22-4	Surface Plating		
2	Wire	Conductor	0.02	Aurum	7440-57-5	100.00%	0.26%	
3	Mold Compound	Outer	5.68	Silica Fused	60676-86-0	78%~85%	72.64%	
				Epoxy resin	29690-82-2	5%~12%		
				Phenolic Resin	9003-35-4	3%~8%		
				Brominated Resin	N/A	1%~2%		
				Carbon Black	1333-86-4	0.1%~1%		
				Wax	N/A	0.5%~2%		
				Flame Retardant	N/A	1%~5%		
				Catalyst	N/A	<1%		
				Stress Absorbent	N/A	<5%		
				Coupling Agent	N/A	<1%		
				Releasing Agent	N/A	<1%		
4	Wafer	Diode	0.115	Silicon (Si)	7440-21-3	92.40%	1.47%	
				Aluminum(Al)	7429-90-5	0.60%		
				Gold(Au)	7440-57-5	7.00%		
5	Plating	Welding	0.126	Tin	7440-31-5	100.00%	1.61%	
		Total weight	7.819					