



JMC Products
“Transition to RoHS (Lead Free)
Products”
January 25, 2004



Document Objective

The objective of this document is to outline the key JMC Products ROHS (Lead Free) program objectives and schedule.



What is driving the RoHS (Lead-Free) Requirement?

- EU ROHS Directive: By July 1, 2006
- China (pending legislation): By July 1, 2006
- California (pending legislation): By January 1, 2007
- At least 4 other USA states are considering legislation

RoHS (Lead-Free) Initiative

These substances must be eliminated from electronics by July 1, 2006.

Restriction of Hazardous Substances directive – EU RoHS

Substance	Proposed Maximum Concentration
Lead - Pb	0.1 %
Mercury - Hg	0.1 %
Cadmium - Cd	0.01%
Hexavalent Chromium Cr (VI)	0.1 %
Polybrominated biphenyls - PBB	0.1 %
Polybrominated diphenyl ethers - PBDE	0.1 %

While RoHS is a European Union (EU) directive, manufacturers of electrical and electronic equipment that are outside Europe must also abide by this legislation if the equipment they produce is ultimately imported into a EU member state.



JMC's RoHS (Lead-Free) Approach

Objective

Develop and offer reliable, cost efficient RoHS (lead-free) products in advance of the RoHS deadline (July 1, 2006)

JMC Approach

Develop RoHS (lead-free) products the right way and offer them at the right time

Drive supply chain towards a single RoHS (lead-free) solution

JMC's RoHS (lead-free) Mandate

Define a phased approach for introduction of JMC RoHS (lead-free) products

Conduct surveys regarding suppliers' RoHS (lead-free) capabilities

Develop roadmaps of suppliers' RoHS (lead-free) capabilities to deliver RoHS (lead-free) components



JMC's RoHS (Lead-Free) Schedule

Lead-Free Transition Schedule and Deliverables

Action/Plan Description	2004	2005	Jan-06	Feb-06	Mar-06
Identification of all suppliers	X				
JMC Factory received Sony Green Cert	X				
JMC Factory capable of building 100% RoHS	X				
Shipment of some JMC products lead-free to external touch	X				
Review of all Bill of Materials	X				
Evaluation of materials in production	X				
Supplier notification of Initiative requirements	X				
Detailed RoHS action plans completed	X				
Execute RoHS action plans	X				
Review of RoHS action plans	X	X			
Suppliers capable of offering 100% RoHS		X			
All new products to be 100% RoHS		X			
All supplier shipments to be 100% RoHS			X	X	
Ship 100% RoHS products				X	X

X Completed
X In Process

JMC Products currently shipping RoHS compliant products