
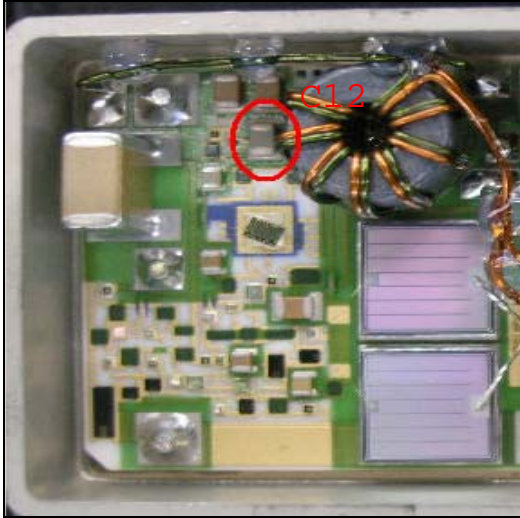


ALERT

1. TITLE (Class, Function, Type, etc.) Filter Assembly, Electrical, Hybrid Product		2. DOCUMENT NUMBER FV5-A-09-01	
4. MANUFACTURER AND ADDRESS International Rectifier, HiRel 2270 Martin Ave. Santa Clara, CA 95050		3. DATE (DD-MMM-YY) 11 August 2009	
		5. PART NUMBER 95010-01HZA, AFM704A/CH, AFM704AN/CH	
		6. NATIONAL STOCK NUMBER 5915-01-447-2498	
		7. SPECIFICATION MIL-PRF-38534	
8. TYPE DESIGNATOR QML		8. TYPE DESIGNATOR QML	
9. LOT DATE CODE START See Document		10. LOT DATE CODE END See Document	
11. MANUFACTURER'S POINT OF CONTACT Cust. Service: Soon Ng, QA: Granville C. Rains		12. CAGE 52467	
13. MANUFACTURER'S FAX NOT AVAILABLE		14. MFR. POC PHONE (978) 534-5776 or (408) 450-5886	
15. MANUFACTURER'S E-MAIL Sng2@irf.com or Grains1@irf.com		16. CROSS REFERENCE VENDOR No Applicable	
17. CROSS REFERENCE CAGE Not Applicable		18. CROSS REFERENCE PART Not Applicable	
19. PROBLEM DESCRIPTION / DISCUSSION / EFFECT <p>The AFM704A/CH and AFM704AN/CH FILTER, EMI, TRANSIENT SUPPRESSION MODULE product listed above were identified with a potential reliability problem. A chip capacitor with Tin Lead (SnPb) termination was used in error in place of a capacitor of the same value, but with Palladium Silver (PdAg) termination specification. The circuit designation for this chip capacitor is C12 and requires conductive epoxy for its attachment in-circuit.</p> <p>While no field operational failures have been reported to International Rectifier with the AFM704 hybrid products that could be attributed to this issue, our reliability data shows a compatibility issue with epoxy mounted chip capacitors with Tin Lead terminations – these can lead to epoxy interface (joint) failure in time under normal use conditions. If the C12 capacitor / epoxy interface fails, it could result in an open circuit, including a loose capacitor inside the hybrid. This failure condition could cause an electrical failure and result in a complete shutdown of the module.</p>			
20. ACTION TAKEN/PLANNED <p>International Rectifier has taken the following corrective actions:</p> <ol style="list-style-type: none"> 1) Reviewed all designs that use the C12 component to verify the attach media. No other product was affected. 2) Replaced the C12 capacitor in the AFM704A series hybrids with a capacitor that is suitable for epoxy attach. 3) Identified all AFM704 series affected by this C12 component – See attached list herein for details. 4) Updated Design Rules Check sheets to verify component termination & attach media for compatibility. <p>As part of containment activity, International Rectifier recommends that the subject product be returned for rework or replacement as necessary. For assistance in returning the product, contact the local manufacturer's representative or customer services at (978) 534-5776.</p> <p>This Alert has been coordinated with DSCC-VQH prior to its release.</p>			
21. DATE MFR. NOTIFIED Not Applicable		22. MANUFACTURER'S RESPONSE <input type="checkbox"/> REPLY ATTACHED <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> NO REPLY	
23. ORIGINATOR ADDRESS/POINT OF CONTACT Granville C. Rains, Manager, Quality Assurance International Rectifier 2270 Martin Ave Santa Clara, CA 95050			
24. GIDEP REPRESENTATIVE Granville C. Rains		25. SIGNATURE 	
26. DATE 07 Aug. 2009			

19. PROBLEM DESCRIPTION / DISCUSSION / EFFECT- Continued.



Capacitor C12 – Epoxy Mount Type

20. ACTION TAKEN/PLANNED- Continued

Affected Material:

Part Number	D/C	S/N	Part Number	D/C	S/N
AFM704A/CH*B	0707	0703071,072	AFM704AN/CH*B	0750	0747001-024
AFM704A/CH*B	0707	0703073-078	AFM704AN/CH*B	0824	0821017-026
AFM704A/CH*B	0707	0703079-094	AFM704AN/CH*B	0824	0821001-003
AFM704A/CH*B	0707	0703095, 096-100	AFM704AN/CH*B	0824	0821004-014, 016
AFM704A/CH*B	0712	0703039-046	AFM704AN/CH*B	0824	0821029-040
AFM704A/CH*B	0712	0703047-050	AFM704AN/CH*B	0825	0821015
AFM704A/CH*B	0727	0721001, 002, 004-015, 017-022	AFM704AN/CH*B	0835	0828048
AFM704A/CH*B	0727	0721023-034, 036-039	AFM704AN/CH*B	0838	0828044
AFM704A/CH*B	0727	0721040-055	AFM704AN/CH*B	0847	0843001-008
AFM704A/CH*B	0727	0721056-063	AFM704AN/CH*B	0847	0843020-029
AFM704A/CH*B	0727	0721064-075, 077-088, 090-092			
AFM704A/CH*B	0727	0721093-100			
AFM704A/CH*B	0728	0721133, 134, 136-145, 147-150			
AFM704A/CH*B	0728	0721114-120, 122			
AFM704A/CH*B	0728	0721123-132			
AFM704A/CH*B	0733	0727087-091			
AFM704A/CH*B	0733	0727003-014, 016-019			
AFM704A/CH*B	0733	0727020, 021, 023, 024, 026-037			
AFM704A/CH*B	0733	0727038-040, 042-053, 055			
AFM704A/CH*B	0733	0727057-060, 062-066, 092-100			
AFM704A/CH*B	0737	0727022, 041, 056, 078, 080, 101, 102, 104-106, 108-111			
AFM704A/CH*B	0737	0727112-123			
AFM704A/CH*B	0737	0727124-129			
AFM704A/CH*B	0737	0727130-145			
AFM704A/CH*B	0745	0727001, 025			
AFM704A/CH*B	0746	0734086, 097			
AFM704A/CH*B	0750	0734036, 042, 049, 008, 120, 122, 124, 132, 148			
AFM704A/CH*B	0750	0744044-047, 050			
AFM704A/CH*B	0752	0744119, 136			
AFM704A/CH*B	0819	0815012-022, 024			
AFM704A/CH*B	0822	0815069, 072, 083, 101, 105, 114			
AFM704A/CH*B	0823	0815004, 008, 010, 023, 029			
AFM704A/CH*B	0826	0822032-052			
AFM704A/CH*B	0826	0822077-083, 085-109			
AFM704A/CH*B	0826	0822110-115, 117-125			
AFM704A/CH*B	0826	0822126-140			
AFM704A/CH*B	0829	0822072, 084			
AFM704A/CH*B	0830	0822116			
AFM704A/CH*B	0915	0902099, 100			
AFM704A/CH*B	0915	0902051-070			
AFM704A/CH*B	0915	0902071-090			