

AEROSPACE DATA EXCHANGE PROGRAM TRANSMITTAL

# PROBLEM ADVISORY



<b>1. TITLE</b> SMD AND DATASHEET CORRECTIONS - HYBRID MICROCIRCUITS RHD SERIES PRODUCT			<b>2. DOCUMENT NUMBER</b> HYB-2018-PA-0001			
			<b>3. DATE (Year, Month, Date)</b> 2017 November 09			
<b>4. MANUFACTURER NAME AND ADDRESS</b> CAES 35 S. Service Road Plainview, NY 11803			<b>5. MANUFACTURER POINT OF CONTACT NAME</b> Wayne Seemungal			
			<b>6. MANUFACTURER POINT OF CONTACT TELEPHONE</b> (516) 752-2421			
			<b>7. MANUFACTURER POINT OF CONTACT EMAIL</b> Wayne.seemungal@cobhamaes.com			
<b>8. CAGE CODE</b> 88379	<b>9. LDC START</b> 1201	<b>10. LDC END</b> See Block 21	<b>11. PRODUCT IDENTIFICATION CODE</b> See Appendix A	<b>12. BASE PART</b> See Appendix A		
<b>13. BLANK</b>			<b>14. SMD NUMBER</b> See Appendix A	<b>15. DEVICE TYPE DESIGNATOR</b> See Appendix A		
			<b>16. RHA LEVELS</b> See Appendix A	<b>17. QML LEVEL</b> See Appendix A		
			<b>18. NON QML LEVEL</b> See Appendix A	<b>19. GIDEP NUMBER</b> KP7-P-18-01		
			<b>20. PROBLEM DESCRIPTION / DISCUSSION / EFFECT</b> The front page of the Radiation Hard Device (RHD) family data sheets has stated "Single power supply operation at 3.3V to 5V" but all characterization shown in the Electrical Performance table within the data sheet was performed only at Vcc = 5V. Parts were not initially tested at 3.3V.  Data sheets and/or SMDs currently in circulation for the RHD Series (part numbers per attached Appendix A) list the features as: <ul style="list-style-type: none"> <li>• Single power supply operation (3.3V to 5.0V) or dual power operation (+/-1.65 to +/-2.5V)</li> <li>• In certain cases, the Recommended Operating Conditions in the datasheet and or the associated SMD state:                         <ul style="list-style-type: none"> <li>○ +VCC at 3.3 to 5.0V.</li> </ul> </li> <li>• The Electrical Performance Characteristics in the data sheet and or the associated SMD state: +VCC at 5.0V.</li> </ul> Users of these devices are advised as follows: <ul style="list-style-type: none"> <li>• Device characterization is limited to the conditions listed per attached Appendix A.</li> <li>• The current Acceptance Test Procedure (ATP) for the RHD Series part numbers listed per attached Appendix A are tested at 5.0V and 3.3V as indicated in the table.</li> <li>• The Pre and Post Radiation Electrical Testing for the RHD Series part numbers listed per attached Appendix A was performed as indicated in the table at 5.0V and 3.3V.</li> </ul>			
<b>21. ACTION TAKEN / PLANNED</b> Engineering Change Notices (ECNs) will be issued against the Data Sheets and SMDs for all affected parts in the RHD Series. Notifications are currently in process. <ul style="list-style-type: none"> <li>• The complete list of the affected RHD Series parts appears in Appendix A of this document.</li> <li>• Parts will be scheduled for characterization and pre &amp; post radiation testing for all conditions. The schedule for characterization will be established based on customer input.</li> <li>• Users who have questions should contact Mr. Wayne Seemungal at CAES via email: wayne.seemungal@cobhamaes.com or via telephone at (516)752-2421.</li> </ul>						
<b>22. DISPOSITIONARY RECOMMENDATION:</b>			CHECK & <input checked="" type="checkbox"/> USE AS IS	CONTACT <input checked="" type="checkbox"/> MANUFACTURER	REMOVE & <input type="checkbox"/> REPLACE	CORRECT & <input type="checkbox"/> USE AS SPECIFIED
<b>23. ADEPT REPRESENTATIVE</b> Timothy L Meade			<b>24. SIGNATURE</b> 		<b>25. DATE</b> 3/15/2018	

**Appendix A**

**RHD Series GIDEP Advisory**

CAES part number	SMD part number	5V Characterization		3.3V Characterization	
		Pre-RAD	Post-RAD	Pre-RAD	Post-RAD
5900	5962-10241	Yes	H - 1Mrad	in process	-
5901	5962-10241	Yes	H - 1Mrad	-	-
5902	5962-10241	Yes	H - 1Mrad	-	-
5903	SMD not released	Yes	-	-	-
5904	SMD not released	obsolete			
5905	SMD not released	obsolete			
5910	5962-10242	Yes	H - 1Mrad	-	-
5912	5962-10242	Yes	H - 1Mrad	in process	-
5920	5962-10243	Yes	H - 1Mrad	-	-
5921	5962-10243	Yes	H - 1Mrad	in process	-
5927	5962-12208	obsolete			
5928	5962-12208	Yes	H - 1Mrad	-	-
5930	5962-11208	Yes	H - 1Mrad	-	-
5931	5962-11208	Yes	H - 1Mrad	-	-
5932	5962-13201	Yes	H - 1Mrad	in process	-
5940	SMD not released	Yes	<100k		
5950	5962-12203	Yes	R - 100krad	-	-
5958	5962-12211	Yes	R - 100krad	-	-
5961	5962-14221	Yes	H - 1Mrad	Y	H - 1Mrad
5962	5962-14221	Yes	H - 1Mrad	Y	H - 1Mrad
5963	5962-14221	Yes	H - 1Mrad	Y	H - 1Mrad
5964	SMD not released	Yes	1Mrad	Y	1Mrad
5980	5962-12226	Yes	H - 1Mrad	Y	Y

NOTES:

The front page of the RHD family data sheets has stated “Single power supply operation at 3.3V to 5V” but all characterization shown in the Electrical Performance table within the data sheet was performed at Vcc = 5V, except as shown in Appendix A.

All TID irradiation is performed with a bias of 5V.