

Reliability Data
**Surface Mount Zero
Bias Schottky Diodes**

CMS-822X Series

Description:

The results below are cumulative test results obtained from testing performed at Calmos Technology. Data results were gathered from the product qualification, engineering evaluation, and reliability monitor.

*Failure is considered to be any part which does not meet the electrical and/or mechanical specifications listed in the Calmos datasheet.

Chart 1. Life Test Demonstrated Performance

Test Name	Test Conditions	Units Tested	Total Device Hours	Total Failed	Failure Rate (%/1K Hrs.)
High Temperature Reverse Bias	$V_R = 80\% V_{BR}$, $T_A = 150^\circ\text{C}$	100	1000	0	0
Operating Life	$T_A = \text{R.T.}$, PFM = Max. Rated Power $V_R = 80\% V_{BR}$, 60Hz	100	1000	0	0
High Temperature Storage	$T_A = 150^\circ\text{C}$	100	1000	0	0

Chart 2. Environmental and Mechanical Tests

Test Name	Test Conditions	Units Tested	Units Failed
Solderability	235°C, 5 seconds	50	0
Solder Heat	260°C, 10 seconds	50	0
Resistance to Solvents	4 solvent groups	50	0
Thermal Shock	-65/+150°C, 5 min. Dwell, 200 cycles	50	0
Temperature Cycle	-65/+150°C, 10 min. Dwell, 200 cycles	50	0
Lead Integrity	2.0 lbs. minimum	50	0