

HMC311ST89ETR | [Data Sheet](#)
**Qualification Summary:**

STRESS TEST	TEST CONDITIONS <sup>*1</sup>	REFERENCE TEST METHOD	NUMBER OF LOTS	SAMPLE SIZE PER LOT	RESULTS
High-Temperature Operating Life (HTOL)	$T_J \geq 125^\circ\text{C}$ , 1000 hrs	JESD22-A108	3	77	Pass
High-Temperature Storage Life (HTSL)	$T_A \geq 150^\circ\text{C}$ , 1000 hrs	JESD22-A103	3	25	Pass
MSL Preconditioning	Per MSL	J-STD-020 JESD22-A113	—	—	Classification
Temperature Cycling (TC)	$-65^\circ\text{C}$ to $+150^\circ\text{C}$ , 500 cycles	JESD22-A104	3	25	Pass
Temperature Humidity Bias (THB) or Biased HAST (HAST)	$85^\circ\text{C}/85\%\text{RH}$ , 1000 hrs or $130^\circ\text{C}/85\%\text{RH}$ , 96 hrs, respectively	JESD22-A101 or JESD22-A110, respectively	3	25	Pass
Autoclave (AC) or Unbiased HAST (UHAST)	$121^\circ\text{C}/100\%\text{RH}$ , 96 hrs or $130^\circ\text{C}/85\%\text{RH}$ , 96 hrs, respectively	JESD22-A102, JESD22-A118, respectively	3	25	Pass
ESD Human Body Model (HBM)	$T_A = 25^\circ\text{C}$	JS-001	1	3	See Data Sheet/ <a href="#">Contact Us</a>
ESD Charge Device Model (CDM)	$T_A = 25^\circ\text{C}$	JS-002	1	3	See Data Sheet/ <a href="#">Contact Us</a>
Latch-Up	Per JESD78	JESD78	1	3	Pass

1. Or equivalent JEDEC conditions

For FIT/MTTF estimates, visit [FIT/MTTF](#)

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