

HMC553ALC3BTR | [Data Sheet](#)
Qualification Summary:

| STRESS TEST | TEST CONDITIONS ^{*1} | 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°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/ Contact Us |
| ESD Charge Device Model (CDM) | $T_A = 25^\circ\text{C}$ | JS-002 | 1 | 3 | See Data Sheet/ Contact Us |
| Latch-Up | Per JESD78 | JESD78 | 1 | 3 | Pass |

1. Or equivalent JEDEC conditions

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

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