

AD469X PCN for DC Spec and AVDD Extension

AD469x Data Sheet Changes

- ▶ AVDD min change from 3.15 V to 2.7 V:

- ▶ Specifications
 - (Table 1)
 - Change min AVDD in Table 1 disclaimer
 - Specify AVDD = 5 V as condition for all AC PERFORMANCE specs
 - Change min AVDD in POWER REQUIREMENTS section

- ▶ Timing Specifications
 - (Table 2)
 - Change min AVDD in Table 2 disclaimer

- ▶ TPC Section:
 - AVDD Current vs. AVDD Voltage → extrapolating supply currents from 3.15V to 2.7V minimum

- ▶ Misc. other sections that mention AVDD min = 3.15V:
 - Pin Configuration section
 - Power Supplies section

DC Specifications Summary

Spec	Previous	Updated	Comments
Offset Error	±430 uV (5.6 LSBs)	±360 uV (4.7 LSBs)	-40°C to +125°C
Offset Drift	None	1.1 uV/°C (0.22 ppm/°C) (14.4 mLSB/°C)	Typical drift spec using box method with -40°C to +125°C temperature range
Gain Error	±0.025 %FS (16.4 LSBs)	±0.0125 %FS (8.2 LSBs)	-40°C to +125°C Reduced by half the original data sheet specs
Gain Drift	None	0.08 ppm/°C (5.2 mLSB/°C)	Typical drift spec using box method with -40°C to +125°C temperature range
Full-Scale Error	None	±11 LSBs	-40°C to +125°C New spec for AD4695 data sheet. Gives the guaranteed total Gain + Offset error for each device.
Full-Scale Error Drift	None	0.25 ppm/°C (16.6 mLSB/°C)	Typical drift spec using box method with -40°C to +125°C temperature range
Input Leakage Current*	10nA	2 nA	Typical spec at +25°C, input voltage = 5V Also adding leakage current TPC plots in slide 5 *In the ANALOG INPUT section

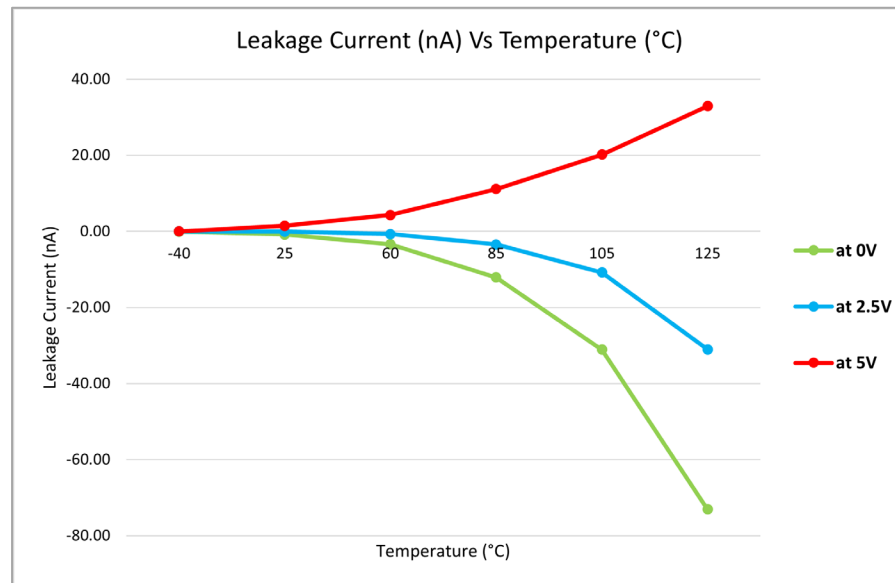
NEW Input Leakage Current TPCs

▶ Leakage Current vs. Temperature

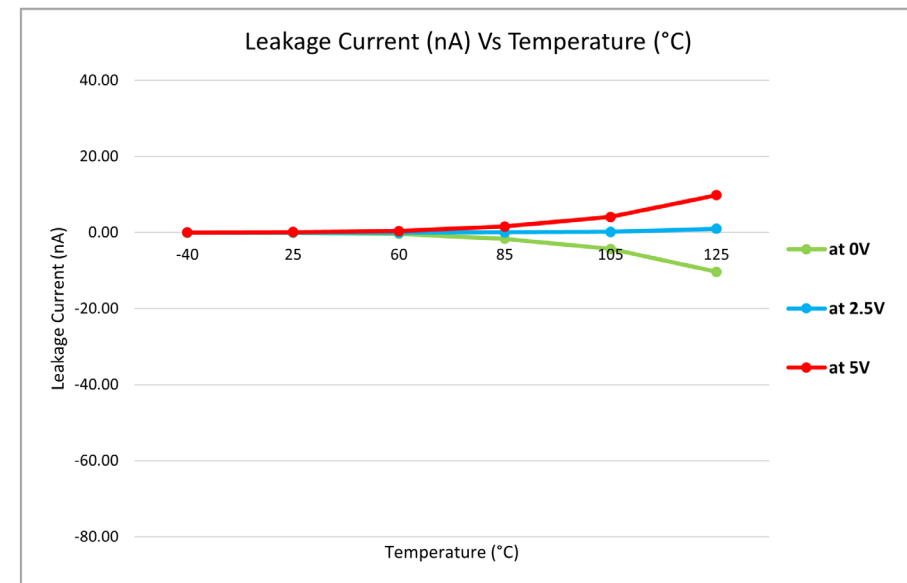
- For input voltages = 0 V, 2.5 V, and 5 V

▶ Slotting into Figure 63 for convenience

- Would have been better to group with other Analog Input TPCs but would disrupt the document too much...



Channel Selected



Channel Not Selected