

PFH500F-28: -55°C Start-Up Test

- Low Temp Start-Up Testing → part of Engineering DVT
- PFH500F-28 Module → able to start-up at -55 °C with 100% Load at both nominal Low / High Line inputs (limited test samples)
- Indicated temperature references the test ambient temperature that the PFH500F-28 module was subjected to
 - Test ambient temperature used is -60°C for headroom / guard band
 - External components (including but not limited to the E-caps) were not exposed to the test ambient temperature and are NOT rated for -55 °C operation
- 100% Compliance to spec is not guaranteed below -40 °C operation

6 Additional Test

6.1 Start-up at -60 degC

PFC firmware: Unreleased 1_2_1 R13_R179_64900
 DCDC firmware: Unreleased 1_2_1 R13_R179_64900
 Hardware condition:

Output Capacitance with 2*220uF (Electrolytic cap) + Para 4*10uF (Ceramic cap), Potted module

Vin(V)	Iin(A)	Pin(W)	Vo1(V)	Io1(A)	Po(W)	Eff(%)	Temp(°C)
115.11	4.928	558	27.74	17.977	498.678	89.37	-60
115.11	4.907	557	27.75	17.977	498.782	89.55	-60
115.11	4.91	557	27.83	17.975	500.203	89.8	-60
115.11	4.914	557	27.77	17.973	499.126	89.61	-60
115.11	4.914	557	27.76	17.975	498.976	89.58	-60
115.11	4.906	556	27.83	17.973	500.136	89.95	-60
115.1	4.915	557	27.75	17.975	498.876	89.56	-60
115.11	4.913	557	27.75	17.973	498.716	89.54	-60
115.1	4.914	557	27.83	17.975	500.308	89.82	-60
115.11	4.912	557	27.78	17.973	499.334	89.65	-60
230.4	2.452	547	27.7	17.975	497.948	91.03	-60
230.4	2.44	547	27.89	17.975	501.329	91.65	-60
230.39	2.43	547	27.74	17.973	498.565	91.15	-60
230.39	2.461	546	27.75	17.975	498.828	91.36	-60
230.39	2.459	546	27.79	17.977	499.528	91.49	-60
230.4	2.431	547	27.72	17.973	498.181	91.08	-60
230.4	2.43	546	27.78	17.977	499.421	91.47	-60
230.4	2.433	547	27.83	17.973	500.16	91.44	-60
230.4	2.43	546	27.85	17.975	500.661	91.7	-60
230.4	2.434	547	27.72	17.975	498.206	91.08	-60