



- InP HEMT Technology
- Lowest W Band Noise Figure
- Wideband LNA, PA

HRL Laboratories, LLC offers access to the H2 InP HEMT technology through a Multi-Project Wafer (MPW) Foundry for prototype and low volume fabrication. Design kits for Cadence, AWR and ADS are available. Biannual MPW lots will sell space in integral numbers of square millimeters. Customers receive 40 pcs of their designs from reticules with typical performance shown below. As is typical with advanced processes, there is no guarantee of any performance specification.

Table I Average of expected values for a typical reticule at $T_A=25^\circ\text{C}$

PCM Parameter	Units	Min	Typ	Max
Maximum Transconductance (gm,max)	mS		1000	
Short Circuit Drain Current (Idss)	mA/mm		300	
Capacitors	pF/mm ²		540	
Tantulum Resistors	Ω /sq		50	
Cutoff Frequency (f_T)	GHz		180	

Table II Maximum Ratings

Symbol	Parameter	Value	Note
V_{DS}	Drain to Source Voltage	2.0 V	
V_{GD}	Gate to Drain Voltage	-3.0 to 0.2 VDC	
V_{GS}	Gate to Source Voltage	-1.0 to 0.2 VDC	
T_M	Die Attach Temperature (30 seconds)	290° C	

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