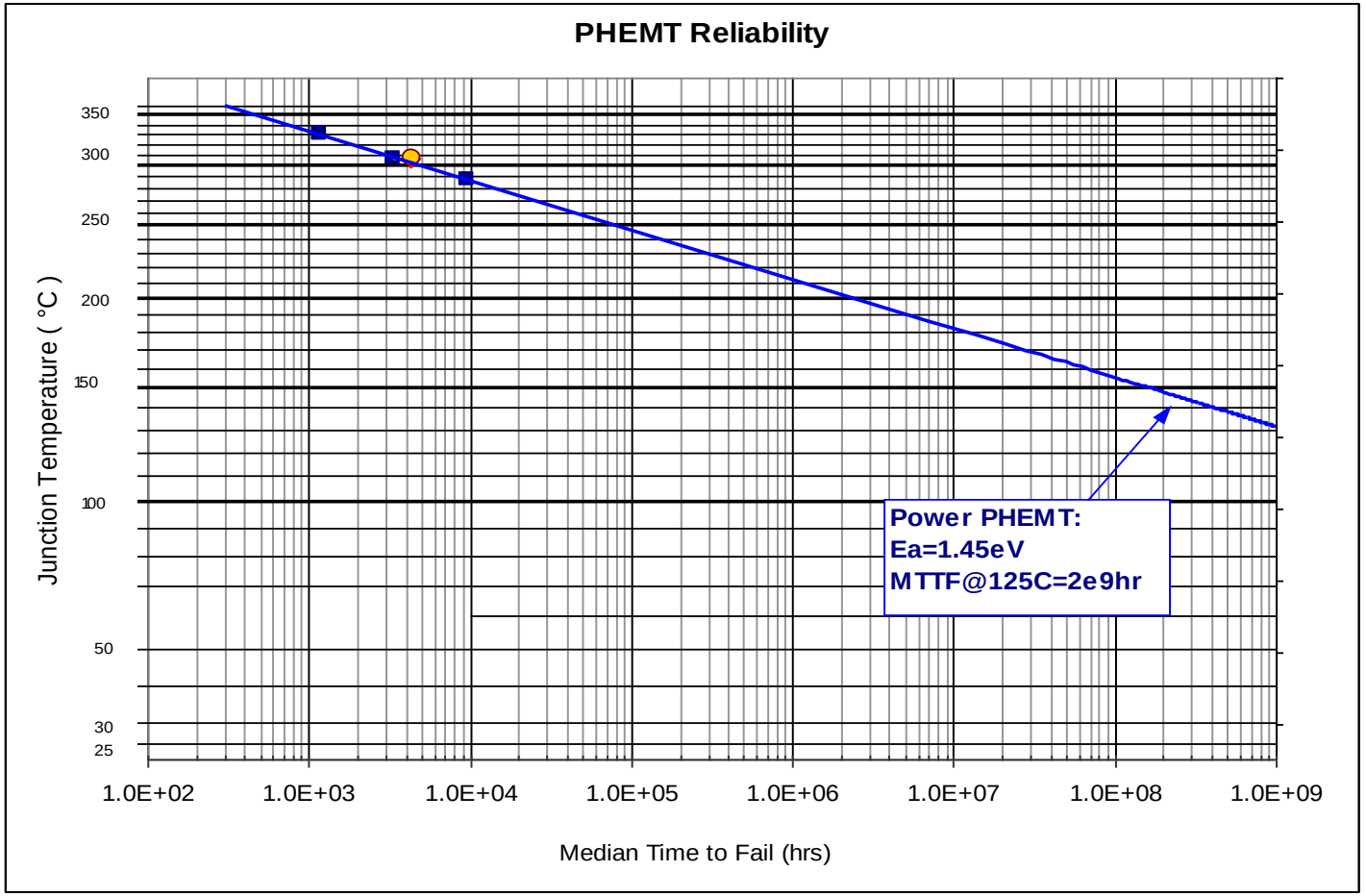
GaAs PHEMT Technology Overview

- A family of high-performance GaAs/InGaAs PHEMT processes have been specifically developed for different applications
- All processes have passed extensive reliability and environmental stress tests
- All process have been qualified by Tier-one customers and in production
- 0.5µm D-Mode PHEMT: For RF transceiver components (PA, LNA, Switch, Mixer) of up to 20GHz applications
- 0.5µm Low-Cost Switch PHEMT for RF switch and LNA of up to 20GHz applications
- 0.5µm E/D-Mode PHEMT: For monolithic integration of PA, switch, and digital control functions
- 0.25µm Power PHEMT: Extends D-mode PHEMT to 40GHz applications
- 0.25um Super Low Noise PHEMT: For up to 40GHz LNA
- 0.5um HFET: For super-high-linearity PA
- 0.25um HFET: Extends 0.5um HFET to 30GHz applications

Example of PHEMT Reliability - Arrhenius Plot for Power PHEMT

Vds = 5-8V, Ids=135mA/mm



MTTF~2e9hr @ 125C with Ea=1.45eV