



# 0.5um Switch PHEMT Process

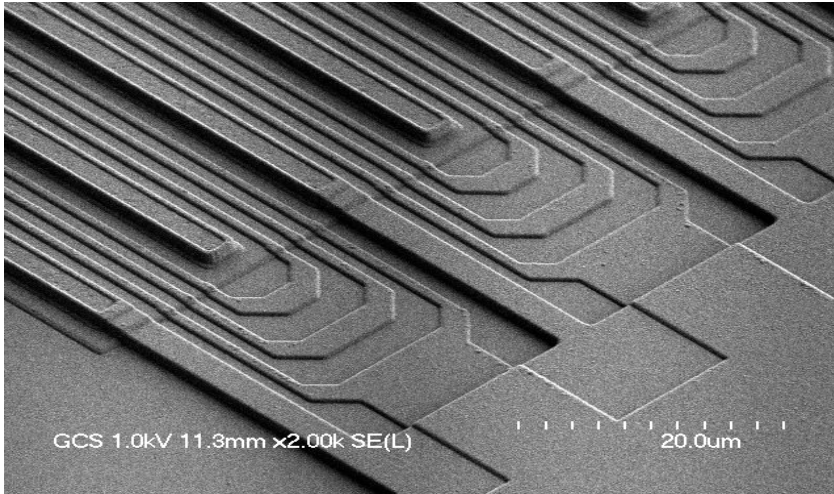
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- GCS has developed a low-cost, high-performance PHEMT process specifically for cell phone and WLAN RF Switch and LNA applications
- Process includes semiconductor resistor and MIM capacitor
- Low insertion loss, high isolation and low harmonics
- This process has been qualified and in production since 2003

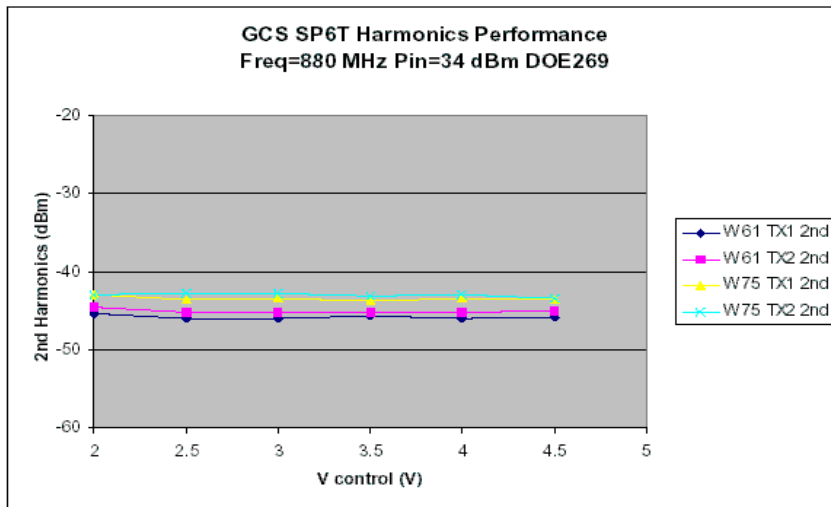
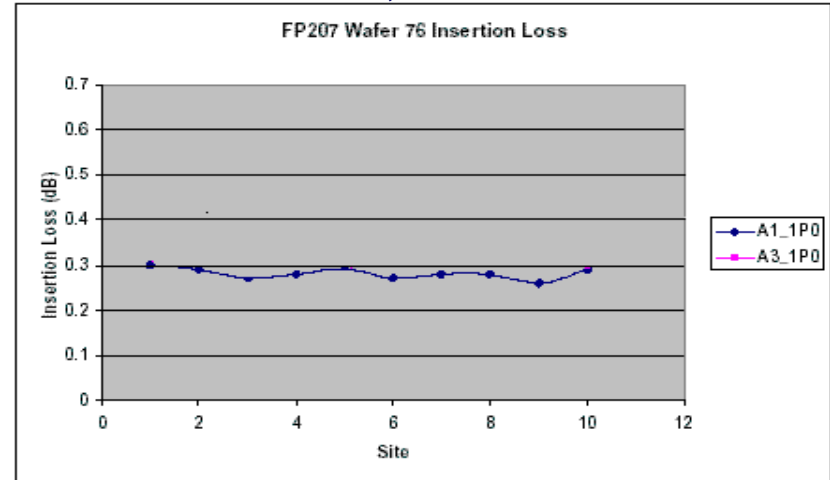
# Low Cost PHEMT Switch for GSM



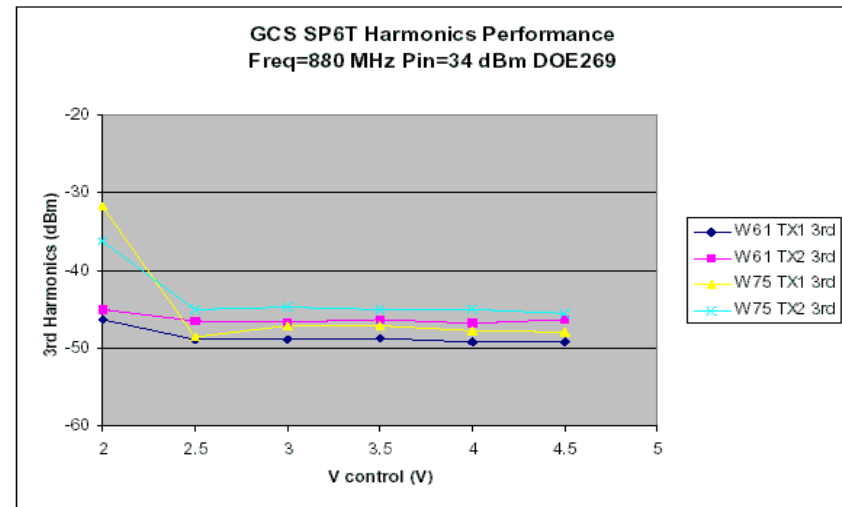
**GSM SP6T PHEMT Switch**



**Insertion Loss ~ 0.3 dB, Isolation loss > 21 dB**



**2<sup>nd</sup> Harmonic**



**3<sup>rd</sup> Harmonic**

# PHEMT GSM Switch Performance Benchmarking



GCS' PHEMT GSM switches generate harmonic levels lower than other foundries'

