# DMOS Devices
For Telecommunications

Supertex DMOS transistors provide rugged and efficient solutions for various functions for telecommunication applications. Their combined features of high breakdown voltage, low threshold voltage, low on-resistance, and low input capacitance are the basis for their design-ins. High breakdown voltage is required to withstand ring voltages, AC line power crossing, and the residuals of lightning surges. Low threshold voltage and low on-resistance ensure handset specifications are met under long loop conditions: far away from the central office. Low input capacitance allows for fast switching speeds while minimizing bias current.

Supertex high voltage low threshold DMOS transistors are available in N-channel and P-channel versions. Both enhancement-mode and depletion-mode are offered. Various through hole and surface mount packages are available.
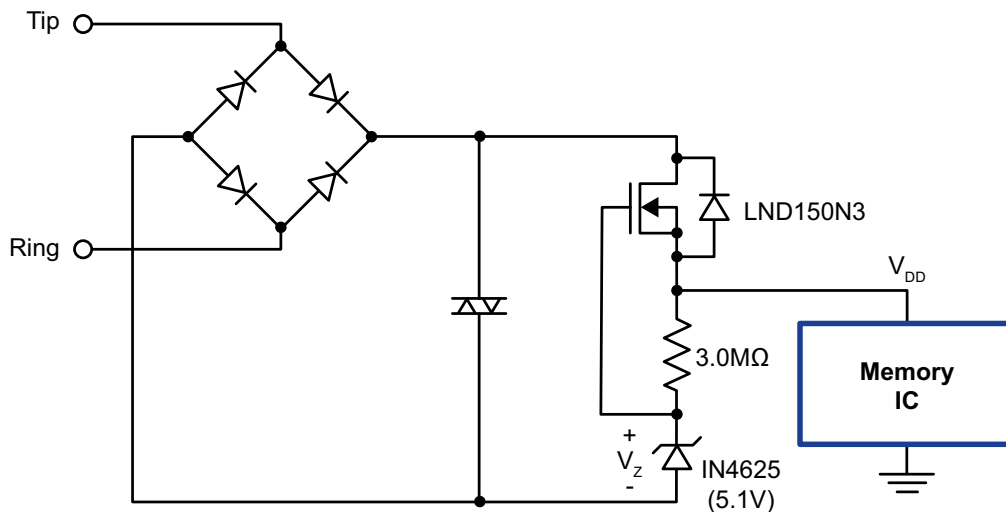
Electronic Hook Switch
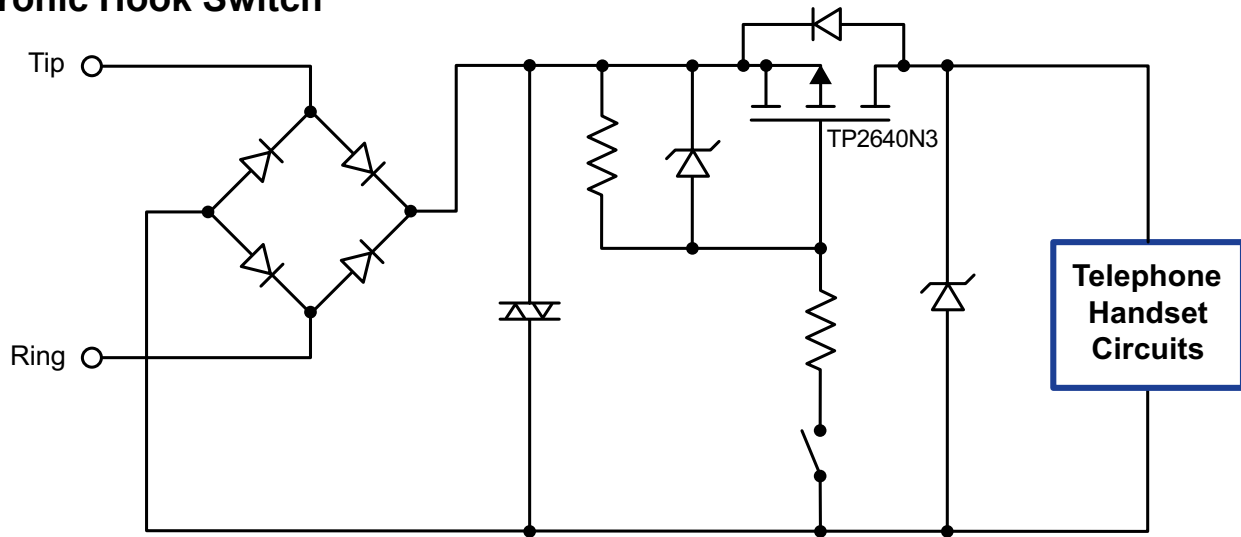
► *400V P-channel MOSFET*

► *-2.0V maximum threshold voltage*

► *Guaranteed 15Ω maximum on-resistance at V_{GS} = -2.5V*

► *Negligible susceptibility to transient turn-on*

Pulse Dialing/Muting Function
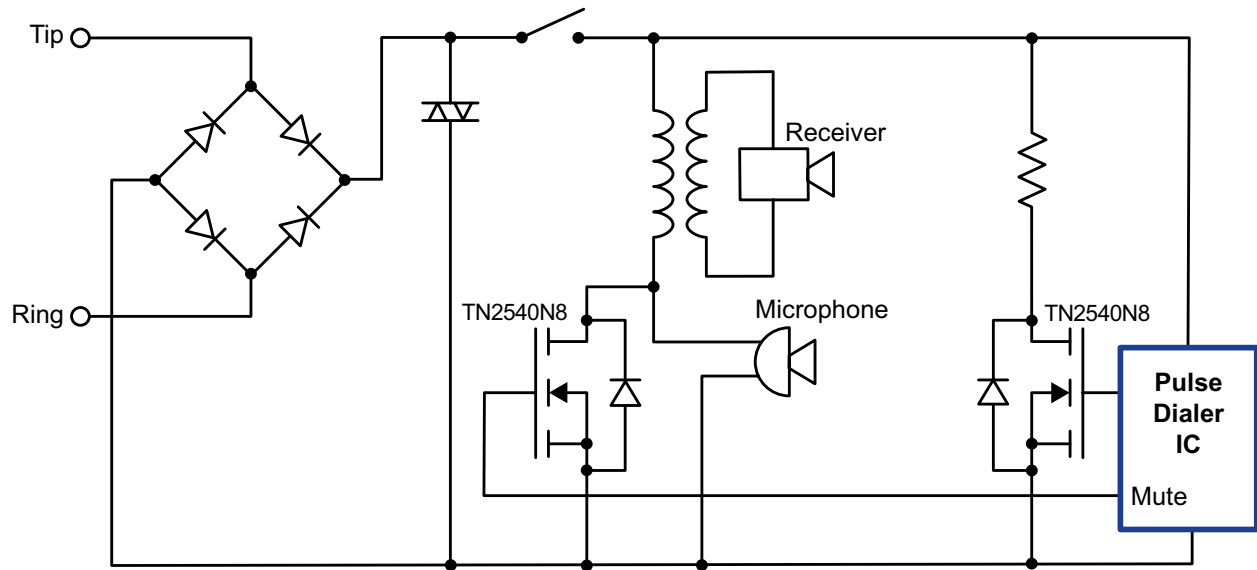
- ► *400V N-channel MOSFET*
- ► *1.8V maximum threshold voltage*
- ► *Maximum input capacitance of 125pF*

Memory Power Supply

- ► *500V depletion mode MOSFET*
- ► *1.0µamp maximum quiescent current*
- ► *1.0mamp on demand output current*

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