

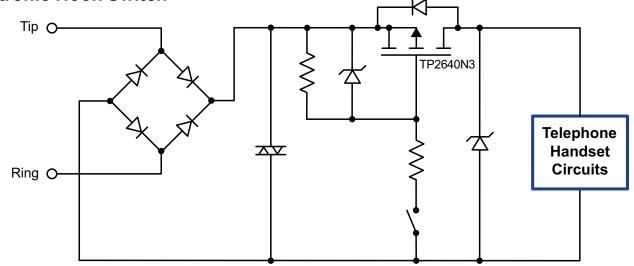
Application Note

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.

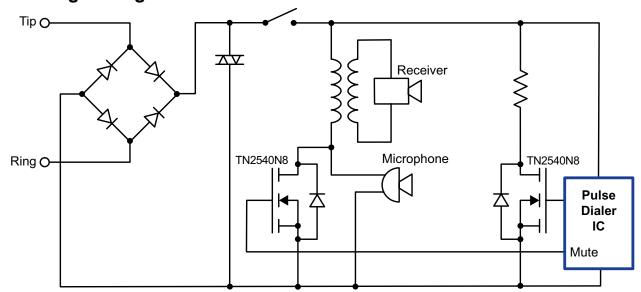
Supertex high voltage low threshold DMOS transistors are available in N-channel and P-channel versions. Both enhancement-mode and depletion-mode are offered. Various through hole and surface mount packages are available.

Electronic Hook Switch



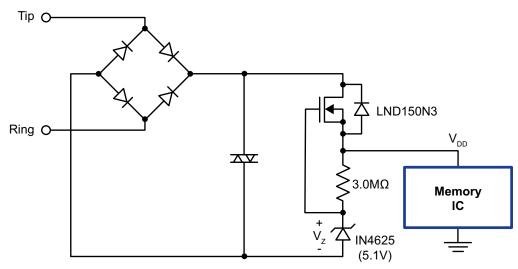
- 400V P-channel MOSFET
- -2.0V maximum threshold voltage
- Guaranteed 15Ω maximum on-resistance at $V_{GS} = -2.5V$
- Negligible susceptibility to transient turn-on

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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