## Supertex inc.

### **High Voltage Regulators and Linear Circuits using DN25**

Depletion-mode MOSFETs can be used either as "normally closed" switches or current sources. This note shows circuits, utilizing depletion mode devices, that will benefit many applications. The main performance features of the circuits and

**Current Surge Protection** 

Current limit up to 150mA

Back-to-back pair for bi-directional limiting

Inrush limiting for lamps/motors/capacitive loads, instrumentation, telecommunication

Solid State Relay

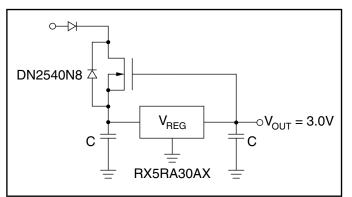
# DN25540N3 DN25540N3

- Normally on
- □ ±400V blocking
- □ Low C<sub>IN</sub> for fast switching

Telecommunication, instrumentation, fax machines, modems, data line diagnostics

examples of applications are listed. For more applications information on depletion mode MOSFETs, refer to other LND1 and DN25 series application notes.

### **High Voltage Protected Regulator**



- □ ±400V transient protection
- □ +5V to +400V operation
- □ Typically 800nA quiescent current

Telecommunication, automotive, fax machines, off-line control circuits

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SMPS Start-Up

- Off-line capability
- General Switchable to save power
- Improves efficiency

Switchmode power supply

11/12/01

