TN2640

N-Channel Enhancement-Mode DMOS FET

Switching Waveform and Test Circuit

Product Overview:

TN2640K4 N-Channel Enhancement-Mode DMOS FET. The device features fast switching speeds, low parasitic capacitances and a low gate threshold for ease of driving the FET. It's D-Pak package gives designers the flexibility to use the device in a wide range of power switching and amplifying applications. It has a high breakdown voltage (400V), a low onresistance (5.0W) and a low input capacitance (225pF) for fast switching applications. Adding these features into the D-Pak package increases the power dissipation capability to 2.5W in small footprints utilizing surface mount technology. It's low input and output leakage feature improves standby power dissipation while minimizing signal attenuation.

Features:	Benefits:	
Low threshold — 2.0V max.	Can be operated directly from logic level input signals. Eliminates the need for a level translator.	
High input impedance	Eliminates the need to supply DC current into the gate.	
Low input capacitance	Improves overall efficiency.	
Fast switching speeds	Maximizes switching speed to help improve overall efficiency.	
Low on resistance	Improves overall efficiency	
Free from secondary breakdown compared to bipolar transistors	Maximizes efficiency, minimizes power dissipation. Improves overall reliability.	
Low input and output leakage	Improves measurement accuracy. Minimizes signal attenuation.	
Addition of D-Pak option	Increases the power dissipation capability for surface mount technology to 2.5W.	

Supertex inc.

Summary Sheet

Product

Applications:

- DC-DC converters
- Solid state relays
- Ultrasound pulsers
- Telecom switches
- Photo voltaic drivers
- Analog switches



3-Lead TO-252 (K4)



8-Lead SOIC (LG)



3-Lead TO-92 (N3)



120711

N-Channel Enhancement-Mode DMOS FET

Ordering Information / Availability

Part Number	Package Option	Samples	Product Availability
TN2640K4-G	3-Lead TO-252 (Green)	Now	4-6 Weeks ARO
TN2640LG-G	8-Lead SOIC (Green)	Now	4-6 Weeks ARO
TN2640N3-G	3-Lead TO-92 (Green)	Now	4-6 Weeks ARO

⁻G indicates the part is RoHS compliant (Green).





Product Contact

For any questions regarding the TN2640 please contact your local area Supertex sales office, or contact the main office in the US at:

Telephone: 800-222-9883 Fax: 408-222-4895

E-mail: mktg@supertex.com Web site: <u>www.supertex.com</u>

