



深圳市诚芯微科技股份有限公司

SHENZHEN CHENGXINWEI TECHNOLOGY CO., LTD.

N-channel Enhancement Mode Mosfet

CX4040

DESCRIPTION

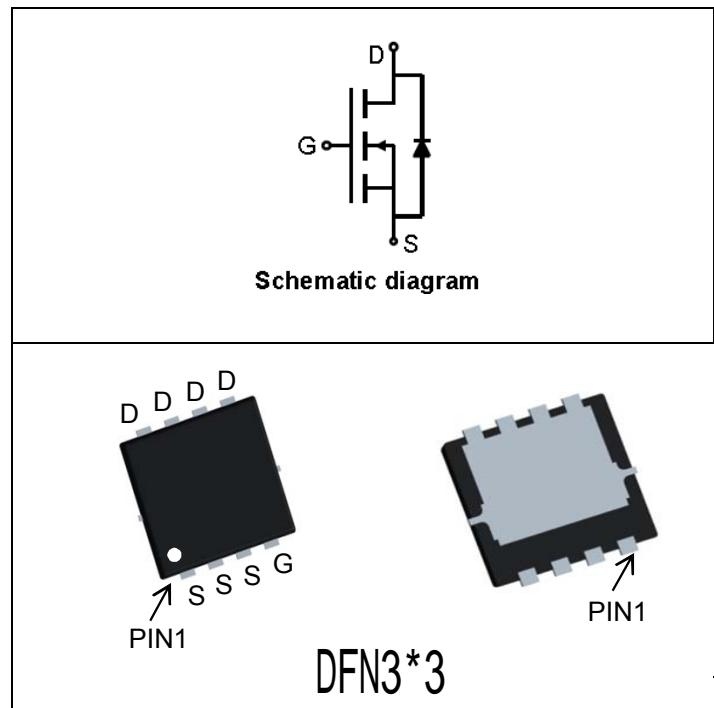
The CX4040 uses advanced trench technology to provide excellent RDS(ON) and low gate charge. This device is suitable for use as a load switch or in PWM applications.

GENERAL FEATURES

- RDS(ON) < 5.5mΩ @ VGS=10V
- RDS(ON) < 8mΩ @ VGS=4.5V
- High Power and current handling capability
- Lead free product is acquired
- Surface Mount Package

Application

- PWM applications
- Load switch
- Power management



■ Absolute Maximum Ratings ($T_A=25^\circ\text{C}$ unless otherwise noted)

| Parameter | Symbol | Limit | Unit |
|---|-----------------|----------|------|
| Drain-source Voltage | V_{DS} | 40 | V |
| Gate-source Voltage | V_{GS} | ± 20 | V |
| Drain Current $T_C=25^\circ\text{C}$ | I_D | 40 | A |
| $T_C=100^\circ\text{C}$ | | 25 | |
| Pulsed Drain Current ^A | I_{DM} | 160 | A |
| Total Power Dissipation $T_C=25^\circ\text{C}$ | P_D | 27.8 | W |
| $T_C=100^\circ\text{C}$ | | 13 | W |
| Single Pulse Avalanche Energy ^B | E_{AS} | 42 | mJ |
| Thermal Resistance Junction-to-Case ^C | $R_{\theta JC}$ | 3.75 | °C/W |
| Junction and Storage Temperature Range | T_J, T_{STG} | -55~+150 | °C |