



深圳市诚芯微科技股份有限公司

SHENZHEN CHENGXINWEI TECHNOLOGY CO., LTD.

## N-channel Enhancement Mode Mosfet

CX3090

### DESCRIPTION

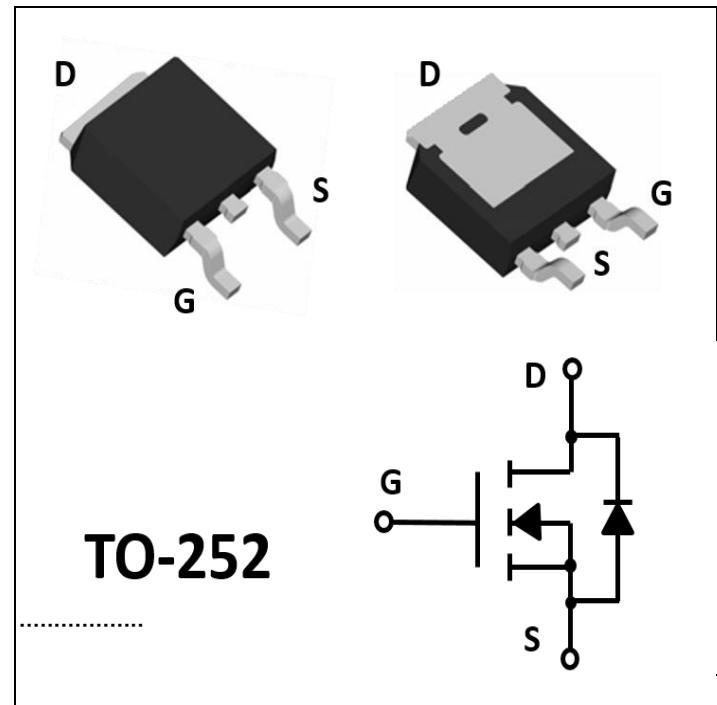
The CX3090 uses advanced trench technology to provide excellent RDS(ON) and low gate charge. This device is suitable for use as a load switch or in PWM applications.

### GENERAL FEATURES

- RDS(ON) < 5.5m Ω @ VGS=4.5V
- RDS(ON) < 3.3m Ω @ VGS=10V
- High Power and current handing 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	$V_{DS}$	30	V
Gate-source Voltage	$V_{GS}$	$\pm 20$	V
Drain Current $T_C=25^\circ\text{C}$	$I_D$	90	A
$T_C=100^\circ\text{C}$		65	
Pulsed Drain Current <sup>A</sup>	$I_{DM}$	360	A
Total Power Dissipation $T_C=25^\circ\text{C}$	$P_D$	81	W
$T_C=100^\circ\text{C}$		40	W
Single Pulse Avalanche Energy <sup>B</sup>	$E_{AS}$	270	mJ
Thermal Resistance Junction-to-Case <sup>C</sup>	$R_{\theta JC}$	1.85	°C / W
Junction and Storage Temperature Range	$T_J, T_{STG}$	-55 ~ +150	°C