

## Description

The TCS1360N01 uses deep trench technology to provide excellent  $R_{DS(ON)}$  and low gate charge. It can be used in a wide variety of applications.

## General Features

- $V_{DS} = 30V$ ,  $I_D = 60A$

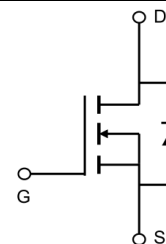
$R_{DS(ON)} < 6.5m\Omega$  @  $V_{GS}=10V$

$R_{DS(ON)} < 10.5m\Omega$  @  $V_{GS}=4.5V$

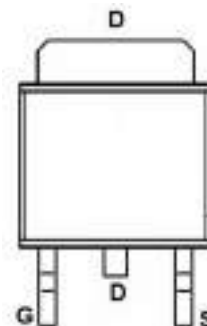
- High Power and current handing capability
- Lead free product is acquired
- Surface Mount Package

## Application

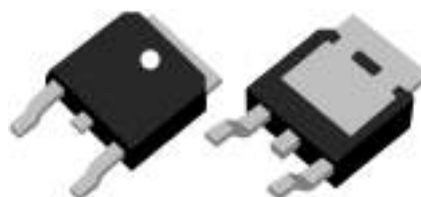
- Load Switch and Battery Protection
- Uninterruptible Power Supplies (UPS)
- Synchronous Rectification in DC/DC and AC/DC Converters



Schematic diagram



pin assignment



TO252-2L

## Absolute Maximum Ratings (TC=25°C unless otherwise noted)

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	$V_{DS}$	30	V
Gate-Source Voltage	$V_{GS}$	$\pm 20$	V
Drain Current-Continuous	$I_D$	60	A
Drain Current-Continuous (TC=100°C)	$I_D(TC=100^\circ C)$	40	A
Pulsed Drain Current (Note 1)	$I_{DM}$	240	A
Maximum Power Dissipation	$P_D$	50	W
Single Pulsed Avalanche Energy (L=0.1mH)	$E_{AS}$	51	mJ
Operating Junction and Storage Temperature Range	$T_J, T_{STG}$	-55 To 150	°C

## Thermal Characteristic

Thermal Resistance, Junction-to-Case	$R_{\theta JC}$	2.5	°C/W
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