

Description

The TCS1540 uses advanced trench technology to provide excellent $R_{DS(ON)}$, low gate charge and operation with gate voltages as low as 4.5V. This device is suitable for use as a load switch or in PWM applications.

General Features

- ◆ $V_{DS} = -40V$, $I_D = -15A$
 $R_{DS(ON)}(Typ.) = 15m\Omega @V_{GS} = -10V$
 $R_{DS(ON)}(Typ.) = 18.5m\Omega @V_{GS} = -4.5V$
- ◆ High power and current handling capability
- ◆ Lead free product is acquired
- ◆ Surface mount package

Application

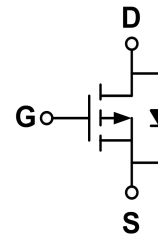
- ◆ PWM applications
- ◆ Load switch

Package

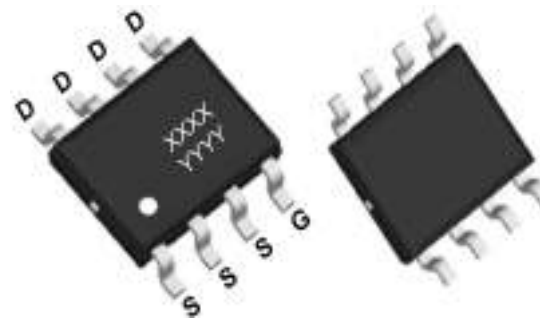
- ◆ SOP-8



Schematic diagram



Marking and pin assignment



XXXX—Wafer Information
 YYYY—Quality Code

Ordering Information

| Part Number | Storage Temperature | Package | Devices Per Reel |
|-------------|---------------------|---------|------------------|
| TCS1540_SH | -55°C to +150°C | SOP-8 | 4000 |

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

| parameter | symbol | limit | unit | |
|--------------------------------|----------|-------|------|---|
| Drain-source voltage | V_{DS} | -40 | V | |
| Gate-source voltage | V_{GS} | ±20 | V | |
| Continuous Drain Current | I_D | 25°C | -15 | A |
| | | 100°C | -9.6 | |
| Plused Drain Current | I_{DM} | -60 | A | |
| Avalanche energy ^A | E_{AS} | 30 | mJ | |
| Power Dissipation ^B | P_D | 25°C | 1.7 | W |
| | | 100°C | 0.7 | |