# TCS1221

20V Dual P-Channel Enhancement Mode MOSFET

## Description

The TCS1221 uses advanced trench technology to provide excellent $R_{DS(ON)}$ and low gate charge . The complementary MOSFETs may be used to form a level shifted high side switch, and for a host of other applications.

## General Features

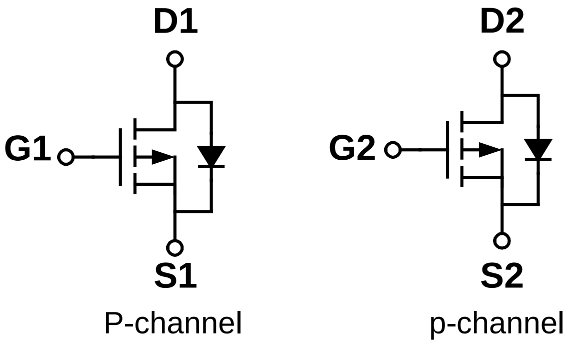
$V_{DS}$ =-20V,ID =-2A
$R_{DS(ON)}$=95mΩ (typical) @ VGS=-4.5V
$R_{DS(ON)}$=117mΩ (typical) @ VGS=-2.5V

◆ Excellent gate charge x $R_{DS(ON)}$ product(FOM)
◆ Very low on-resistance $R_{DS(ON)}$
◆ 150 °C operating temperature
◆ Pb-free lead plating
◆ 100% UIS tested

## Application

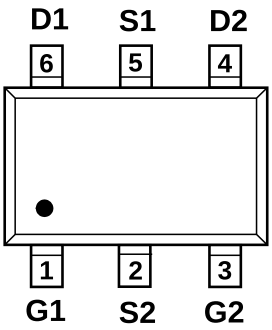
◆ DC/DC Converter
◆ Ideal for high-frequency switching and synchronous rectification

## Schematic diagram



## Marking and pin assignment

SOT-23-6L
(TOP VIEW)



## Package

◆ SOT-23-6L

## Ordering Information

| Part Number | Storage Temperature | Package | Devices Per Reel |
|---|---|---|---|
| TCS1221_F | -55°C to +150°C | SOT-23-6L | 3000 |

## Absolute Maximum Ratings (TA=25℃ unless otherwise noted)

| Parameter | Symbol | Limit | Unit |
|---|---|---|---|
| Drain-source voltage | $V_{DS}$ | -20 | V |
| Gate-source voltage | $V_{GS}$ | ±12 | V |
| Maximum power dissipation | $P_D$ | 0.89 | W |
| Operating junction Temperature range | $T_j$ | -55—150 | ℃ |
| Drain Current-Continuous $T_A$=25°C | $I_D$ | -2 | A |