

### Description

The TCS1202 uses advanced trench technology to provide excellent  $R_{DS(ON)}$ , low gate charge and high density cell Design for ultra low on-resistance. This device is suitable for use as a load switch or in PWM applications.

### General Features

- ◆  $V_{DS} = 100V$ ,  $I_D = 2A$   
 $R_{DS(ON)}(Typ.) = 220m\Omega$  @  $V_{GS} = 10V$   
 $R_{DS(ON)}(Typ.) = 240m\Omega$  @  $V_{GS} = 4.5V$
- ◆ High power and current handling capability
- ◆ Lead free product is acquired
- ◆ Surface mount package

### Application

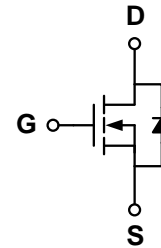
- ◆ PWM applications
- ◆ Load switch

### Package

- ◆ SOT-23-3L

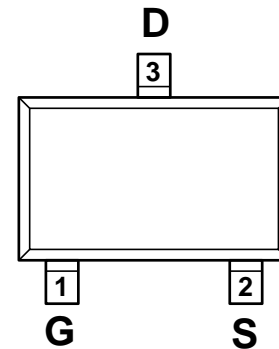


### Schematic diagram



### Marking and pin assignment

SOT-23-3L  
(TOP VIEW)



### Ordering Information

Part Number	Storage Temperature	Package	Devices Per Reel
TCS1202_C	-55°C to +150°C	SOT-23-3L	3000

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

parameter	symbol	limit	unit
Drain-source voltage	$V_{DS}$	100	V
Gate-source voltage	$V_{GS}$	±20	V
Drain current-continuous@Tj=125°C -pulse $d^C$	$I_D$	2	A
	$I_{DM}$	8	A
Drain-source Diode forward current	$I_S$	2	A
Avalanche Current	$I_{AS}$	4.8	A
Single Pulse Avalanche Energy	$E_{AS}$	6.3	mJ
Maximum power dissipation <sup>B</sup>	$P_D$	1.25	W
Operating junction Temperature range	$T_j$	-55—150	°C