

Description

The TCS1214 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

- ◆ $V_{DS} = 100V$, $I_D = 4A$
 $R_{DS(ON)}(Typ.) = 130m\Omega$ @ $V_{GS} = 10V$
 $R_{DS(ON)}(Typ.) = 140m\Omega$ @ $V_{GS} = 4.5V$
- ◆ High power and current handling capability
- ◆ Lead free product is acquired
- ◆ Surface mount package

Application

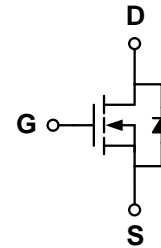
- ◆ PWM applications
- ◆ Load switch

Package

- ◆ SOT-23-3L

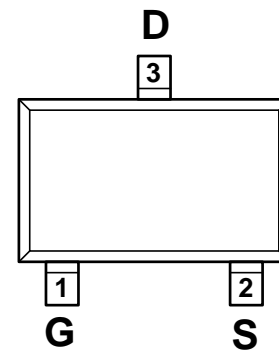


Schematic diagram



Marking and pin assignment

SOT-23-3L
(TOP VIEW)



Ordering Information

Part Number	Storage Temperature	Package	Devices Per Reel
TCS1214_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
Continuous Drain Current	I_D	$T_A = 25^\circ C$	4
		$T_A = 70^\circ C$	3
Pulsed Drain Current ^C	I_{DM}	16	A
Maximum power dissipation ^B	P_D	$T_A = 25^\circ C$	1.4
		$T_A = 70^\circ C$	0.9
Operating junction Temperature range	T_j	-55—150	°C