

Description

The TCS12N60 uses advanced trench technology to provide excellent $R_{DS(ON)}$, low gate charge and operation with gate voltages as low as 2.5V. This device is suitable for use as a Battery protection or in other Switching application.

General Features

$V_{DS}=20V$ $I_D=60A$

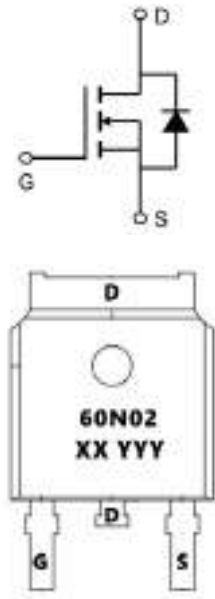
$R_{DS(ON)} < 5.5m\Omega$ @ $V_{GS}=4.5V$ (Type: 4.3m Ω)

Application

Battery protection

Load switch

Uninterruptible power supply



Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
TCS12N60_TC	TO-252-3L	60N02 XX YYY	2500

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

Symbol	Parameter	Max.	Units
VDSS	Drain-Source Voltage	20	V
VGSS	Gate-Source Voltage	±12	V
ID@TA=25°C	Continuous Drain Current, VGS @ 4.5V	60	A
ID@TA=70°C	Continuous Drain Current, VGS @ 4.5V	42	A
IDM	Pulsed Drain Current <small>note1</small>	210	A
EAS	Single Pulsed Avalanche Energy <small>note2</small>	56.2	mJ
PD@TA=25°C	Power Dissipation	57	W
RθJC	Thermal Resistance, Junction to Case	2.63	°C/W
TJ, TSTG	Operating and Storage Temperature Range	-55 to +175	°C