

## ■ Features

1. The protection IC and The Dual-Nch MOSFET to use common Drain are integrated into One-packaging IC.

2. Reduced Pin-Count by fully connecting internally.

3. Application Part

1) Protection IC

① Uses high withstand voltage CMOS process.

- The charger section can be connected up to absolute maximum rating 24V.

② Detection voltage precision

- Overcharge detection voltage

$\pm 80\text{mV}$  ( $T_a=25^\circ\text{C}$ )

- Overdischarge detection voltage

$\pm 110\text{mV}$  ( $T_a=25^\circ\text{C}$ )

- Discharging overcurrent detection voltage

$\pm 35\text{mV}$  ( $T_a=25^\circ\text{C}$ )

③ Built-in detection delay times

- Overcharge detection delay time

Min 0.001s / Typ 0.08s / Max 0.20s ( $T_a=25^\circ\text{C}$ )

- Overdischarge detection delay time)

Min 1ms / Typ 40ms / Max 100ms ( $T_a=25^\circ\text{C}$ )

- Discharging overcurrent detection delay time)

Min 1ms / Typ 10ms / Max 30ms ( $T_a=25^\circ\text{C}$ )

- Short detection delay time)

Typ 300 $\mu\text{s}$  / Max 800 $\mu\text{s}$  ( $T_a=25^\circ\text{C}$ )

④ With abnormal charger detection function

⑤ 0V charge function is allowed

⑥ Auto Wake-up function is not allowed

2) FET

① Using advanced trench technology to provide excellent  $R_{DS(on)}$ , low gate charge and operation with gate voltage as low as 2.5V while retaining a 12V  $V_{GS(MAX)}$ .

② Common drain configuration

③ General characteristics

-  $V_{DS}$  (V) = 20V

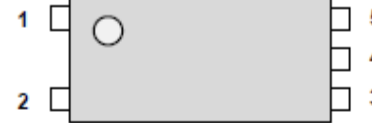
-  $I_D$  (A) = 6A

-  $R_{DS(on)} < 80\text{m}\Omega$  ( $V_{GS} = 4.5\text{V}$ ,  $I_D = 1\text{A}$ )

## ■ Pin Assignment

[ Package: TEP-5L ]

<Top view>



<Bottom view>



1	$T_P$ (N.C)
2	Source 1(same as $V_{SS}$ )
3	Source 2
4	$V_{DD}$
5	$V_-$
6	Drain

## ■ Block Diagram

