

■ Features

- The protection IC and The Dual-Nch MOSFET to use common Drain are integrated into One-packaging IC.
- Reduced Pin-Count by fully connecting internally.
- Application Part

1) Protection IC

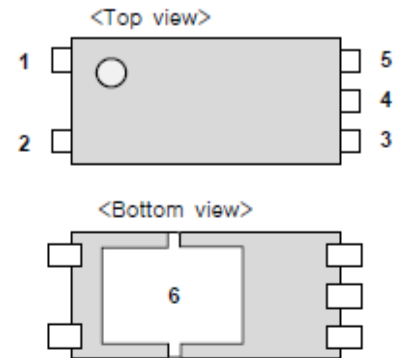
- Uses high withstand voltage CMOS process.
 - The charger section can be connected up to absolute maximum rating 28V.
- Detection voltage precision
 - Overcharge detection voltage $\pm 25\text{mV}$ ($T_a=25^\circ\text{C}$), $\pm 45\text{mV}$ ($T_a=-30\sim 70^\circ\text{C}$)
 - Overdischarge detection voltage $\pm 70\text{mV}$ ($T_a=25^\circ\text{C}$), $\pm 80\text{mV}$ ($T_a=-30\sim 70^\circ\text{C}$)
 - Discharging overcurrent detection voltage $\pm 10\text{mV}$ ($T_a=25^\circ\text{C}$), $\pm 20\text{mV}$ ($T_a=-30\sim 70^\circ\text{C}$)
 - Charging overcurrent detection voltage $\pm 20\text{mV}$ ($T_a=25^\circ\text{C}$), $\pm 40\text{mV}$ ($T_a=-30\sim 70^\circ\text{C}$)
- Built-in detection delay times
 - Overcharge detection delay time $1.00\pm 0.20\text{s}$ ($T_a=25^\circ\text{C}$), $1.00[+0.50, -0.40]\text{s}$ ($T_a=-30\sim 70^\circ\text{C}$)
 - Overdischarge detection delay time $96.0\pm 19.2\text{ms}$ ($T_a=25^\circ\text{C}$), $96.0[+48, -38.4]\text{ms}$ ($T_a=-30\sim 70^\circ\text{C}$)
 - Discharging overcurrent detection delay time $12.0\pm 2.4\text{ms}$ ($T_a=25^\circ\text{C}$), $12.0[+6, -4.8]\text{ms}$ ($T_a=-30\sim 70^\circ\text{C}$)
 - Charging overcurrent detection delay time $6.0\pm 1.2\text{ms}$ ($T_a=25^\circ\text{C}$), $6.0[+3.0, -2.4]\text{ms}$ ($T_a=-30\sim 70^\circ\text{C}$)
 - Short detection delay time $400[+160, -120]\mu\text{s}$ ($T_a=25^\circ\text{C}$), $400[+400, -200]\mu\text{s}$ ($T_a=-30\sim 70^\circ\text{C}$)
- With abnormal charger detection function
- OV charge function is allowed
- Auto Wake-up function is allowed

2) FET

- Using advanced trench technology to provide excellent $R_{\text{DS(on)}}$, low gate charge and operation with gate voltage as low as 2.5V while retaining a 12V $V_{\text{GS(MAX)}}$.
- The protection for ESD
- Common drain configuration
- General characteristics
 - V_{DS} (V) = 24V
 - I_{D} (A) = 7A
 - $R_{\text{DS(on)}} < 45\text{m}\Omega$ ($V_{\text{GS}} = 3.9\text{V}$, $I_{\text{D}} = 5\text{A}$)
 - ESD Rating : 2000V HBM

■ Pin Assignment

[Package: TEP-5L]



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

■ Block Diagram

