MM3865D 2023/07/20

### **Outline**

This IC is linear charge control IC for 1-cell Li-ion and Li-polymer battery.

This IC can control accurate charge current (3 to 500mA), so it is suitable small and low current consumption IC for mobile devices used low-capacitance battery.

This IC have multiple rank matched charge voltage for each battery (4.1V to 4.45V) and can be individually set Full-charge current, so various charging systems can be constructed.

Low BAT leak current contributes to extending the usage time of mobile devices.

# **Product Series**

Linear Charger IC (Single function Type)

#### **Features**

- 1. Low charge current control suitable for low-capacitance battery (charge current 3mA min)
- 2. Multiple charge voltage (4.1V to 4.45V)
- 3. Adjustable Full charge current setting (ITERML pin)
- 4. High Rating input voltage(13V)
- 5. Low BAT leak current (10nA max)
- 6. Multiple battery temperature profile
- 7. Space saving package (1.8mm x 1.6mm x 0.55mm)
- 8. Operating temperature range Ta=-40~85℃

# **Applications**

Small mobile device(earphone, healthcare device, others)



# **Major Specification**

Parameter	Specifications	Unit
Rating voltage (VIN)	13	V
Operating voltage range (VIN)	4.4~6.0	V
Charge voltage	4.10 - 4.45	V
Fast charge current	3- 500	mA
Pre charge current	Fast charge current x0.1	mA
Fast charge starting voltage	2.5	V
Full charge current	0.3 - 250	mA
BAT leakage current (max.)	10	nA
Thermal regulation temperature	125	$^{\circ}$
Charge timer	Pre:0.5, Fast:10	Hour

# **Package**

SSON-6E