

MEL71XX Series Current Regulators

MEL71XX series

is a low dropout current regulator rated for 260~350mA constant sink current.

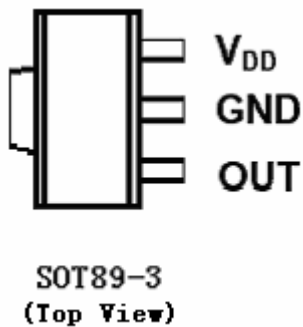
FEATURES

- Supply voltage range: 2.7V~6.0V ;
- 260~350mA constant sink current ;
- no external components required ;
- Low dropout voltage ;
- Packages: SOT89-3 .

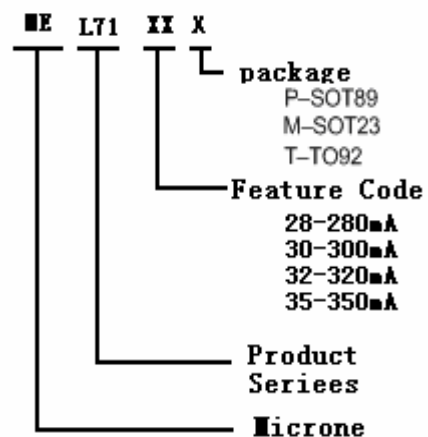
APPLICATIONS

- Power LED driver

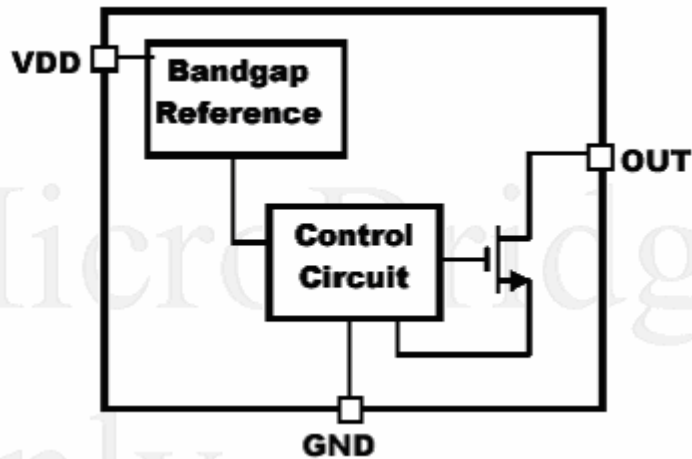
PIN CONFIGURATION



Selection Guide



Block Diagram



Absolute Maximum Ratings

| PARAMETER | SYMBOL | DESCRIPTION | UNIT |
|--------------------------------|--------------|-------------------------------|------|
| Input Voltage | V_{DD} | -0.3 ~7 | V |
| Output Voltage | V_{LEDM} | -0.3 ~7 | V |
| CE pin Voltage | V_{CE} | $V_{SS}-0.3 \sim V_{out}+0.3$ | V |
| Operating Ambient Temperature | T_{max} | 150 | °C |
| Storage Temperature | T_{stg} | -40 ~ +150 | °C |
| Soldering Temperature And Time | T_{solder} | 260°C, 10s | |

Recommended Operating Conditions

| PARAMETER | SYMBOL | Min | Typ | Max | UNIT |
|-------------------------------|-----------|-----|-----|-----|------|
| Supply Voltage | V_{DD} | 2.7 | | 6 | V |
| Output sink current | I_{out} | | | 400 | mA |
| Operating Ambient Temperature | T_a | -40 | | +85 | °C |

Electrical Characteristics

MEL71XX

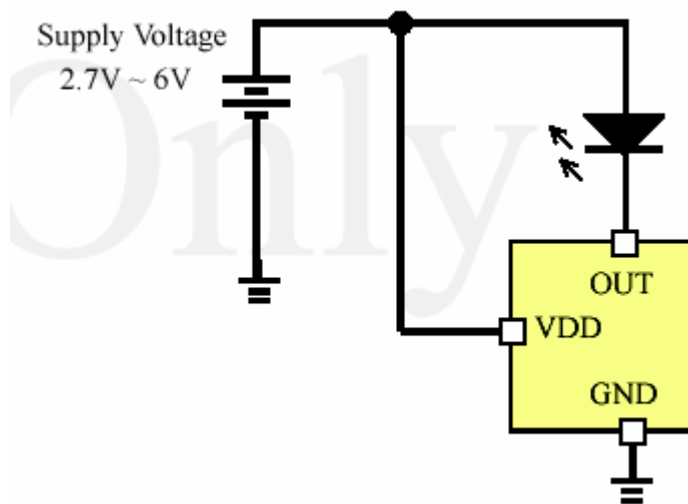
(V_{DD}=3.7V, T_a=25°C, No Load, Unless otherwise stated)

| PARAMETER | SYMBOL | CONDITION | MIX | TYP | MAX | UNIT |
|---------------------|-------------------|--|-----|-----|-----|------|
| Output Sink Current | I _{sink} | V _{OUT} =0.2V | 234 | 260 | 286 | mA |
| | | | 252 | 280 | 308 | |
| | | | 270 | 300 | 330 | |
| | | | 288 | 320 | 352 | |
| | | | 315 | 350 | 385 | |
| Line Regulation | | V _{DD} =3V~6V, V _{OUT} =0.2V | | | 1 | mA/V |
| Dropout Voltage | V _{OUTL} | | | 130 | | mV |
| Supply Current | I _{DD} | | | 90 | | μ A |

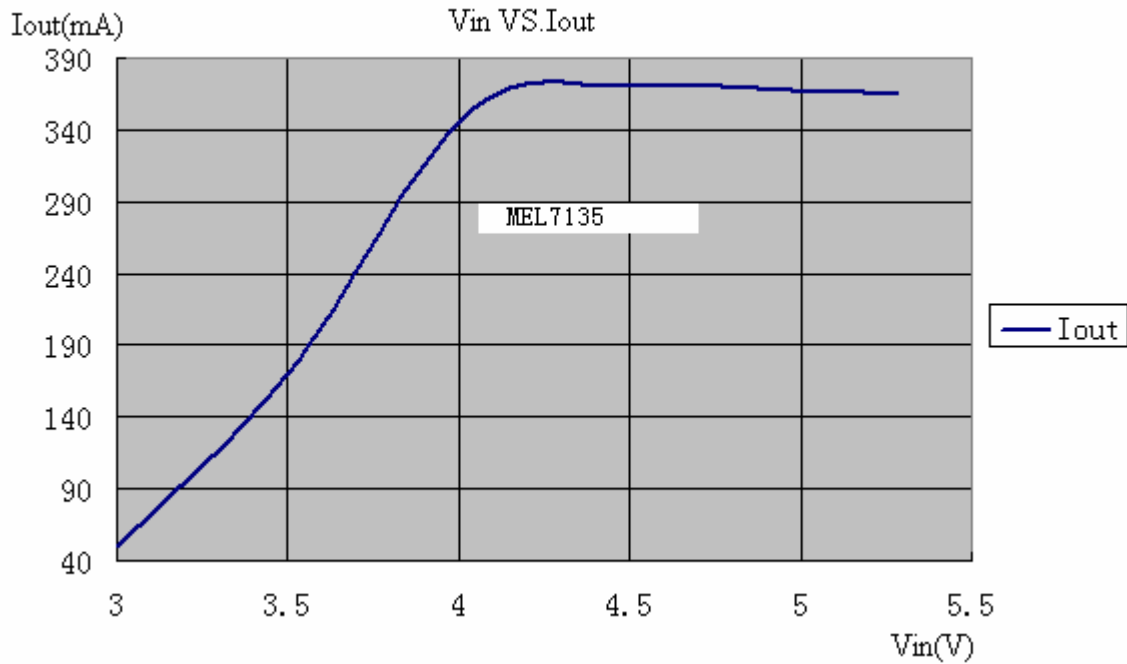
Notice1 :

Output dropout voltage: 90% x I_{out} @V_{out}=200mv

Typical Applications

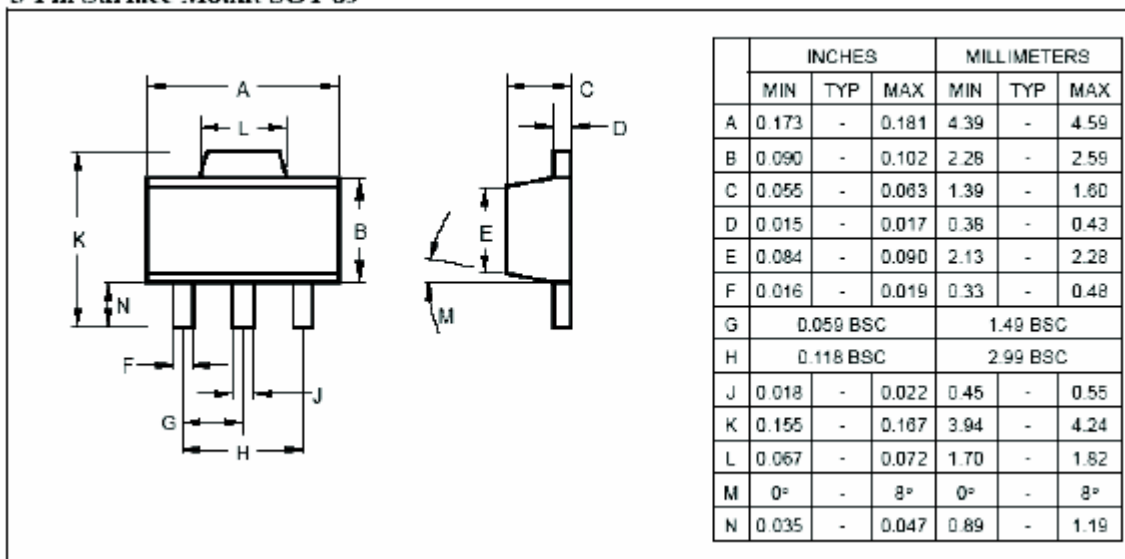


Type Characteristics



Package Dimensions

3-Pin Surface Mount SOT-89



- **The information described herein is subject to change without notice.**
- **Nanjing Micro One Electronics Inc is not responsible for any problems caused by circuits or diagrams described herein whose related industrial properties, patents, or other rights belong to third parties. The application circuit examples explain typical applications of the products, and do not guarantee the success of any specific mass-production design.**
 - **Use of the information described herein for other purposes and/or reproduction or copying without the express permission of Nanjing Micro One Electronics Inc is strictly prohibited.**
 - **The products described herein cannot be used as part of any device or equipment affecting the human body, such as exercise equipment, medical equipment, security systems, gas equipment, or any apparatus installed in airplanes and other vehicles, without prior written permission of Nanjing Micro One Electronics Inc.**
 - **Although Nanjing Micro One Electronics Inc exerts the greatest possible effort to ensure high quality and reliability, the failure or malfunction of semiconductor products may occur. The user of these products should therefore give thorough consideration to safety design, including redundancy, fire-prevention measures, and malfunction prevention, to prevent any accidents, fires, or community damage that may ensue.**

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [LED Display Drivers](#) category:

Click to view products by [Micro One](#) manufacturer:

Other Similar products are found below :

[ISL97631IHTZ-T7A](#) [ISL97632IRT26Z-T](#) [LV5026MC-AH](#) [AW9110CQNR](#) [AiP650EOSA16.TR](#) [MEL7140PG-N](#) [PT4115-MS](#)
[OB5682MWUPA-H](#) [OB5682MMKP-H](#) [RY7614](#) [SL401](#) [TM1637\(TA2007\)](#) [TM1648A](#) [TM5020A](#) [TM1640B\(TA1902\)](#) [TM1812B](#)
[TM1620\(TA1323C\)](#) [WS2811F](#) [AW36402DNR](#) [HT1635D](#) [OB3655MP](#) [OB2578TCPA](#) [OB2365PCPA](#) [OB2201TCPA](#) [OB3619ETJPA-H](#)
[OB3335TJPA-J](#) [OB3600CPA](#) [OB2500NCP](#) [OB3652NCPA-V](#) [OB3652NCPA](#) [OB3652MCPA-H](#) [OB3635ENCPA](#) [OB2225NCPA-P](#)
[OB5284CCPA](#) [OB3635ERCPA-H](#) [OB2365TCPA](#) [OB3639BCPA](#) [OB2281AMP-C](#) [OB5283CPA](#) [OB3398MP](#) [OB3338CPA](#) [RH6618T](#)
[SM16306S](#) [TM1639\(TA1319\)](#) [TM1629C\(TA1319\)](#) [TM1629B\(TA1319\)](#) [TM1629D\(TA1319\)](#) [TM1620B](#) [TM1623\(TA1323C\)](#) [UM1350](#)