

## MEL71XX Series Current Regulators

### MEL71XX series

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

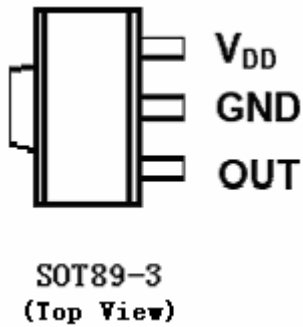
### FEATURES

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

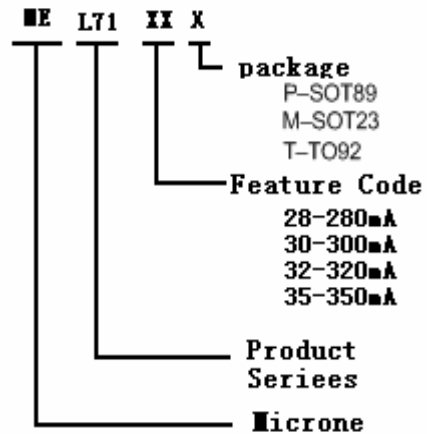
### APPLICATIONS

- Power LED driver

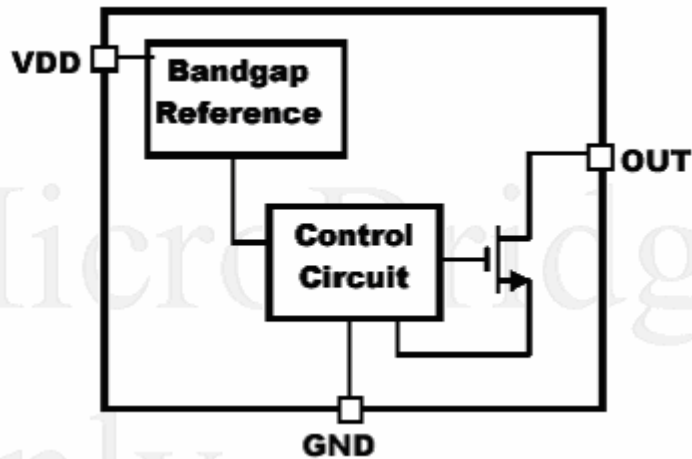
### PIN CONFIGURATION



### 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

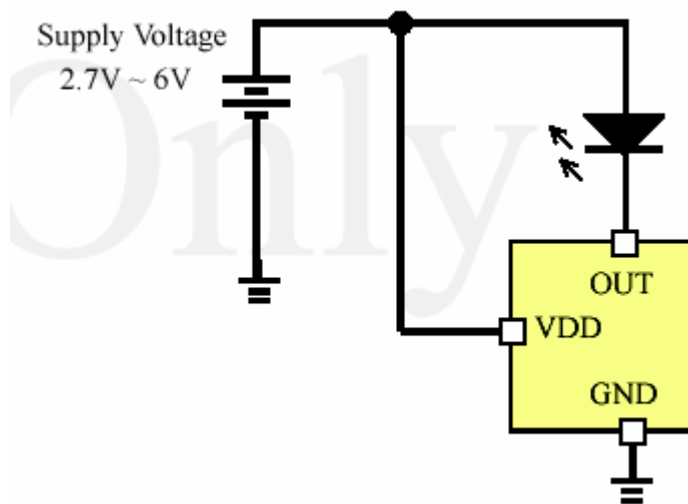
(V<sub>DD</sub>=3.7V, T<sub>a</sub>=25°C, No Load, Unless otherwise stated)

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

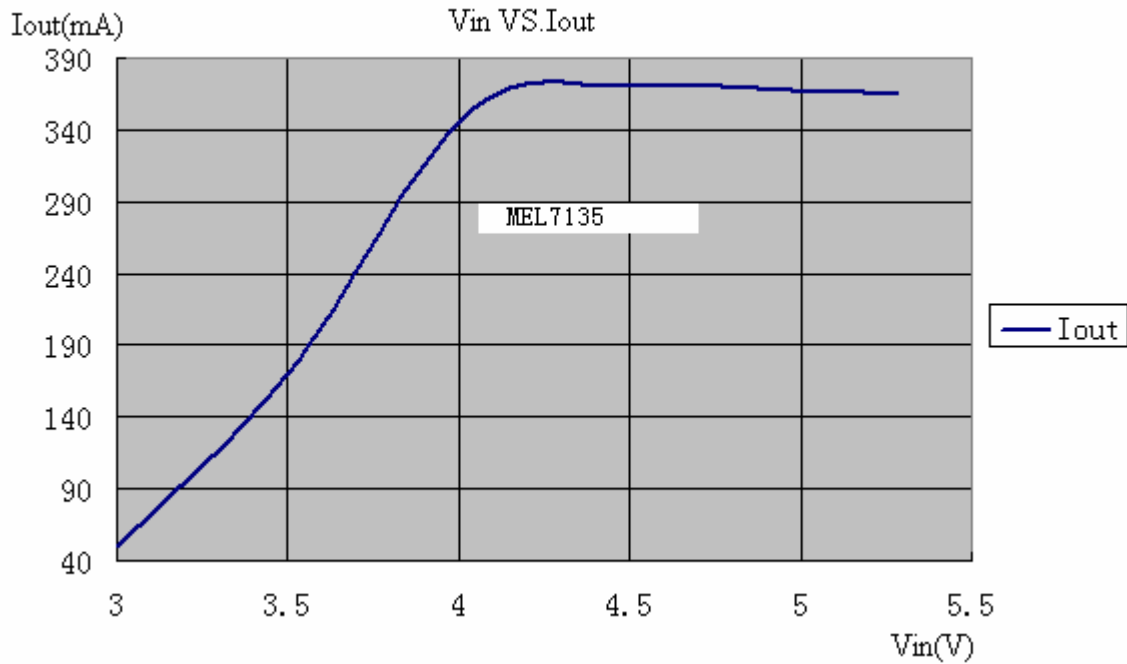
**Notice1 :**

Output dropout voltage: 90% x I<sub>out</sub> @V<sub>out</sub>=200mv

## Typical Applications

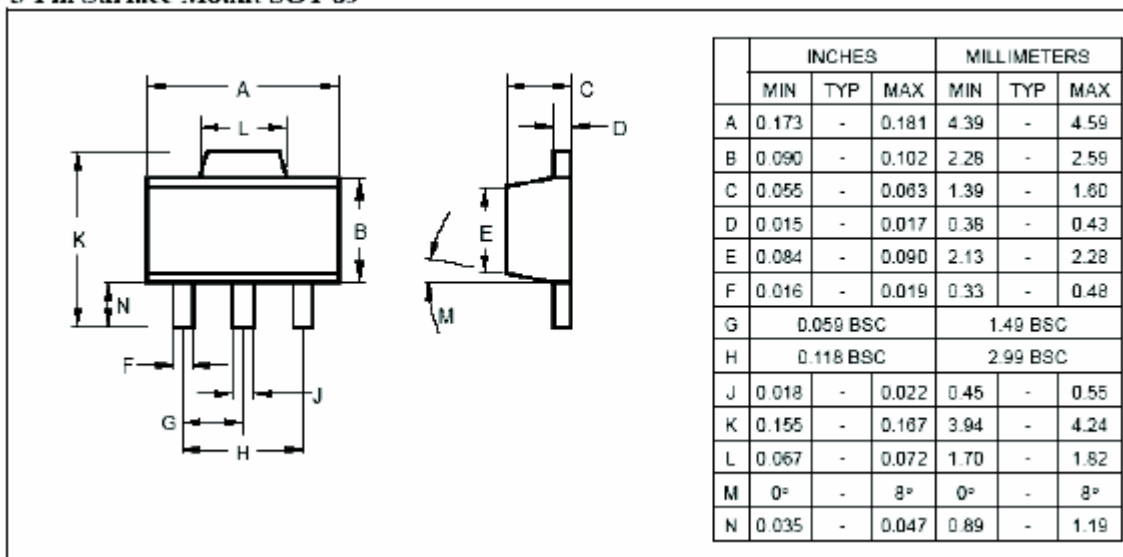


## Type Characteristics



## Package Dimensions

### 3-Pin Surface Mount SOT-89



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