

## HM71XX Series Current Regulators

### HM71XX series

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

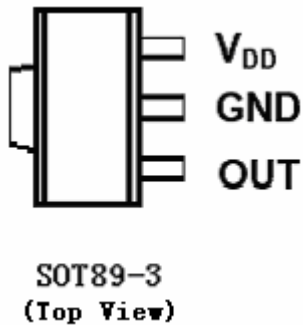
### FEATURES

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

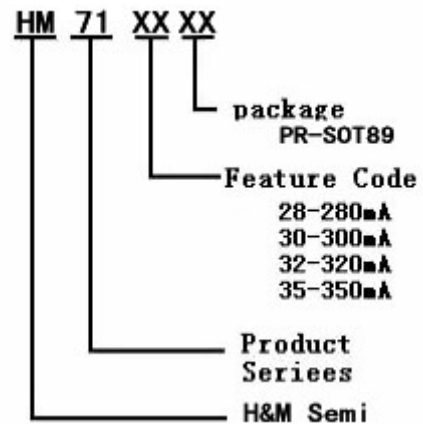
### APPLICATIONS "

- Power LED driver

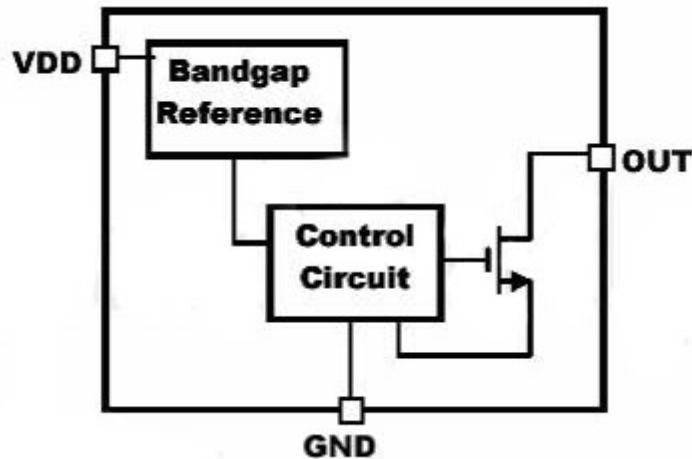
### PIN CONFIGURATION



### 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

HM71XX

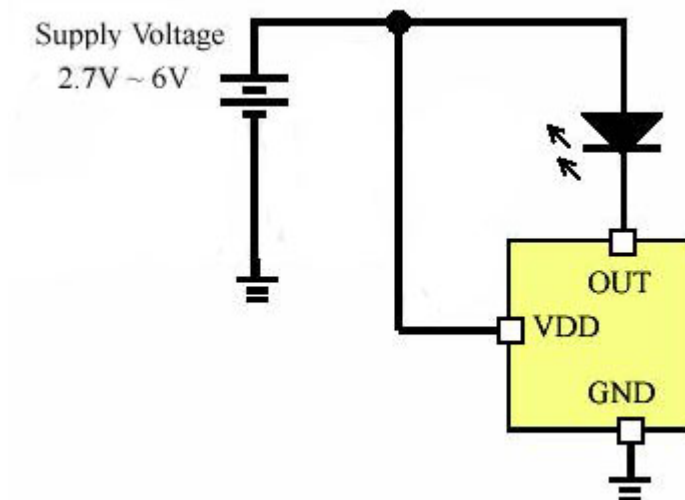
(VDD=3.7V, Ta=25°C, No Load, Unless otherwise stated)

PARAMETER	SYMBOL	CONDITION	MIX	TYP	MAX	UNIT
Output Sink Current	$I_{\text{sink}}$	$V_{\text{OUT}}=0.2\text{V}$	234	260	286	mA
			252	280	308	
			270	300	330	
			288	320	352	
			315	350	385	
Line Regulation		$V_{\text{DD}} = 3\text{V} \sim 6\text{V}$ , $V_{\text{OUT}}=0.2\text{V}$			1	mA/V
Dropout Voltage	$V_{\text{OUTL}}$			130		mV
Supply Current	$I_{\text{DD}}$			90		$\mu\text{A}$

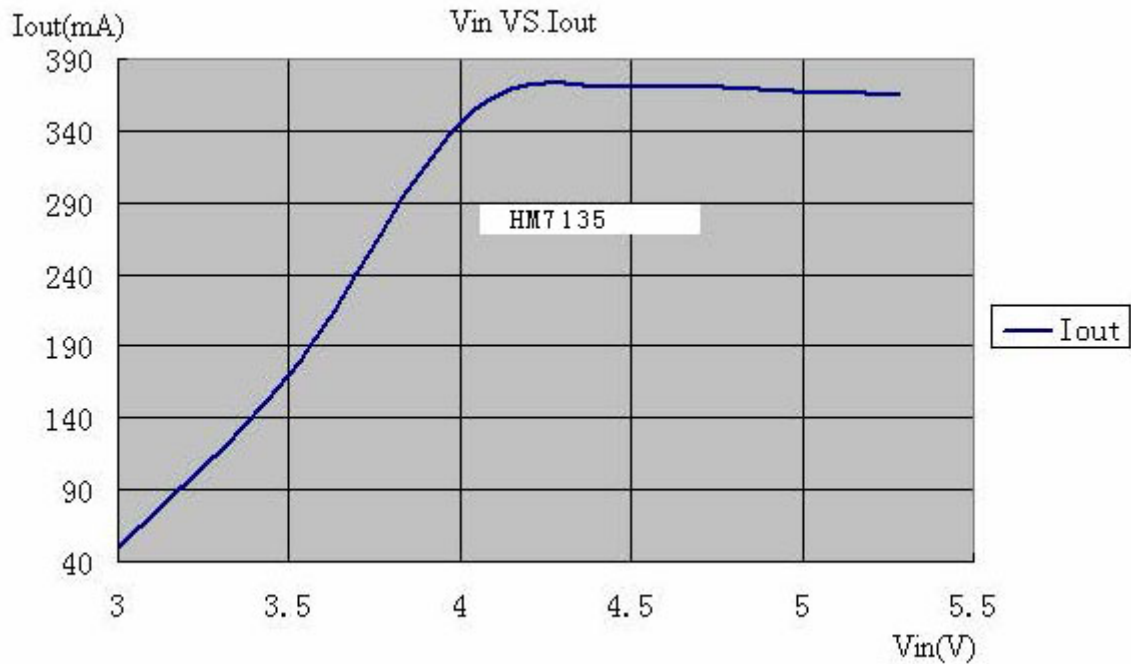
**Notice1 :**

Output dropout voltage: 90% x Iout @Vout=200mv

## Typical Applications



## Type Characteristics



## Package Dimensions

### 3-Pin Surface Mount SOT-89

