

MEL71XX Series Current Regulators

MEL71XX series

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

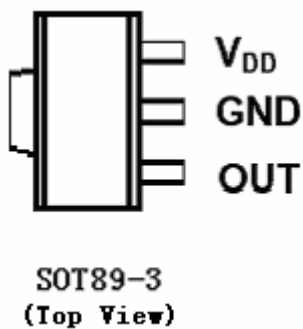
FEATURES

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

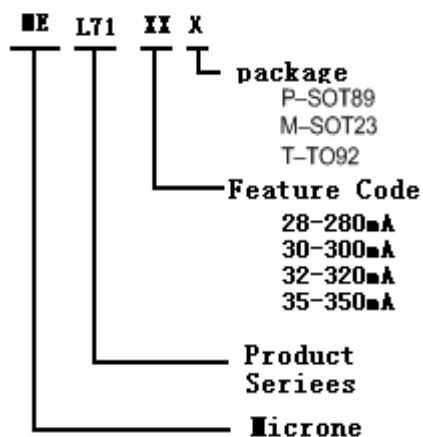
APPLICATIONS

- Power LED driver

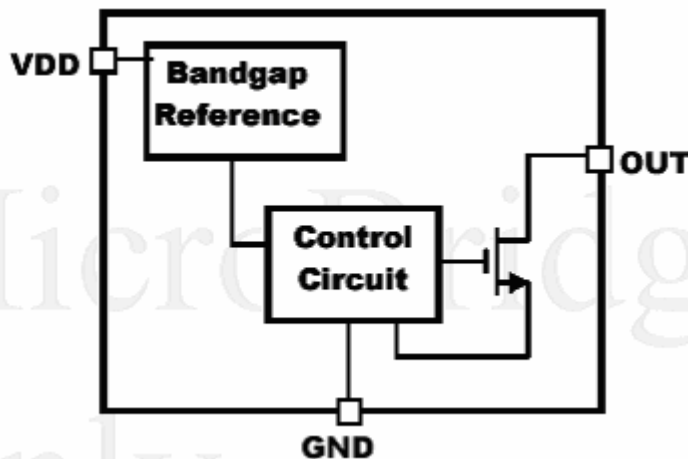
PIN CONFIGURATION



Selection Guide



Block Diagram



Absolute Maximum Ratings

PARAMETER	SYMBOL	DESCRIPTION	UNIT
Input Voltage	V_{DD}	-0.3 ~ 7	V
Output Voltage	$V_{LED M}$	-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

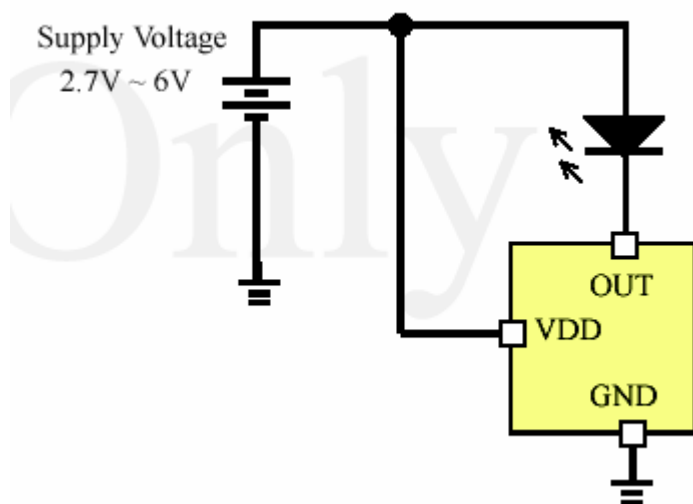
(VDD=3.7V, Ta=25°C, No Load, Unless otherwise stated)

PARAMETER	SYMBOL	CONDITION	MIX	TYP	MAX	UNIT
Output Sink Current	I_{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_{OUTL}			130		mV
Supply Current	I_{DD}			90		μA

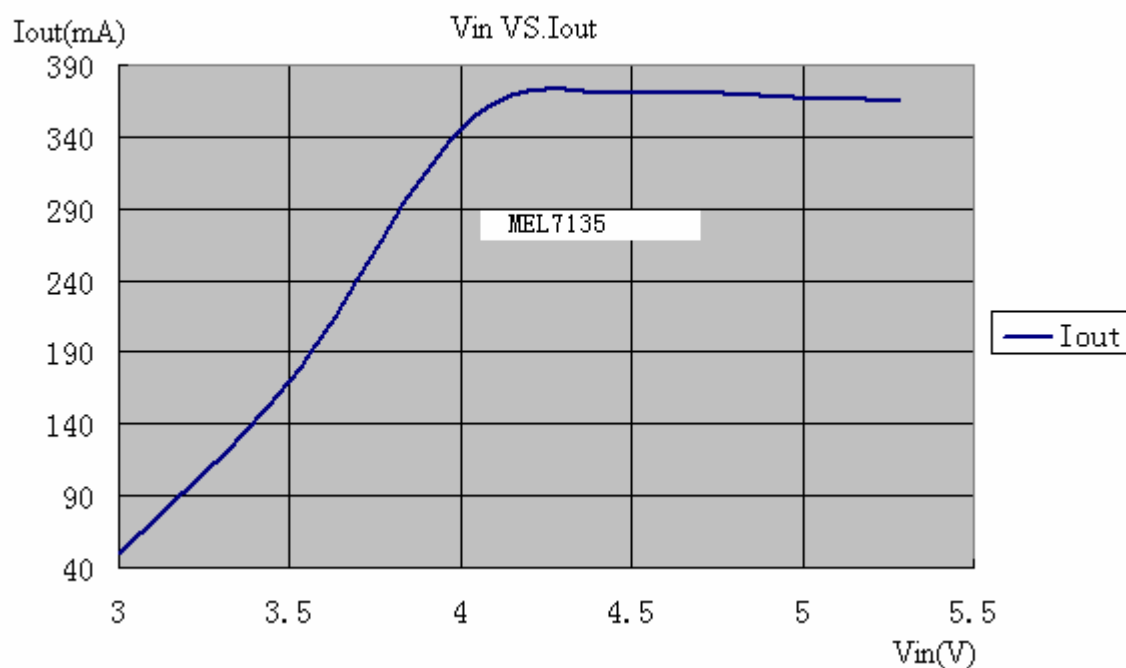
Notice1 :

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

Typical Applications

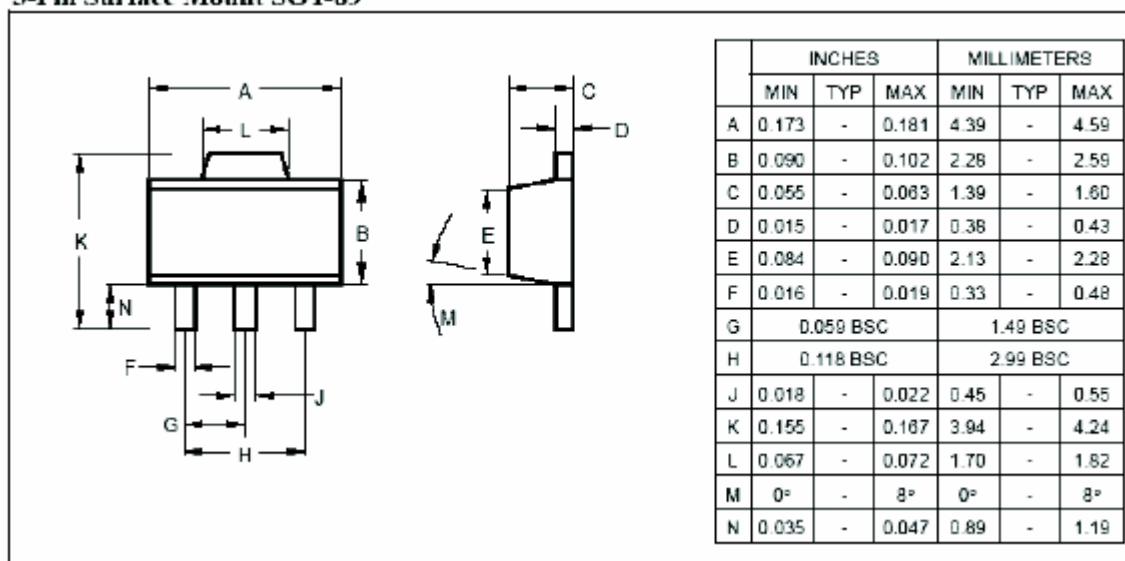


Type Characteristics



Package Dimensions

3-Pin Surface Mount SOT-89



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