
**Low-Dropout, Constant-Current
White LED with Dimming Control and Low Voltage Detect**

FEATURES

- Low Voltage Detection and Indication:
Detect Voltage Level Options by External Resistor
- Up to 700mA LED Bias Current
- External Resistor to set Output Current
- Simple LED Dimming Control
- Build-in Morse Code S.O.S Signal and Single Flash Loop Flicker Function
- Low Dropout Voltage
- Low 0.05uA Shutdown Current
- 2.7V to 6V Supply Voltage Range
- TO-252, SOP-8 and SOT-23 lead-free Package
- ESD Human Body Mode Over 4KV
- Thermal Protection 160 °C

GENERAL DESCRIPTION

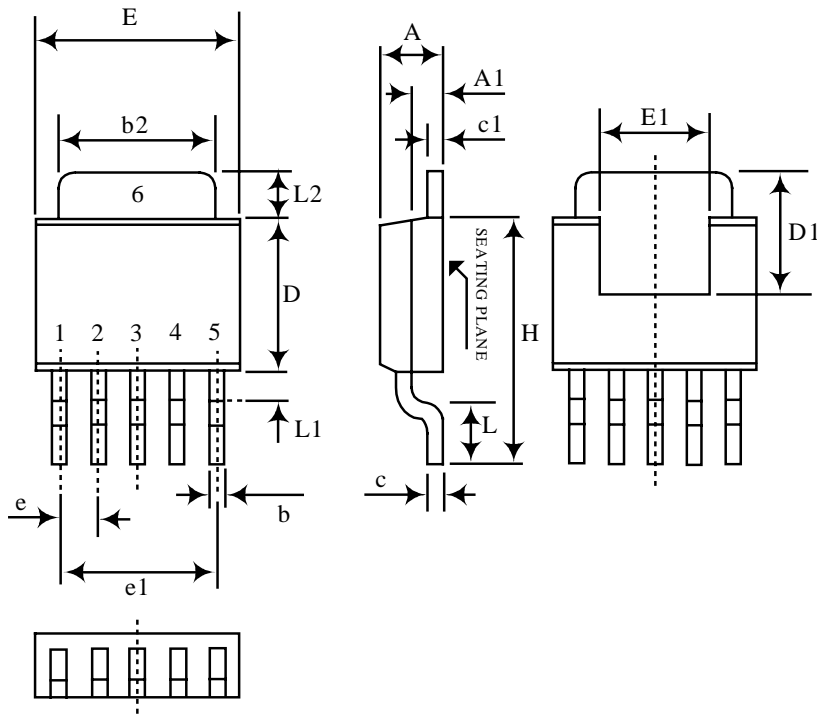
T6340A provides the low-dropout bias supply and the high performance alternative solution for the white LEDs application. The build-in Low Voltage Detection and Indication function can provide the internal LED dimming. Morse Code S.O.S Signal and Single Flash Loop Flicker Function are supported with the significantly lower dropout voltage. The T6340A is available in TO-252, SOP-8 and SOT-23 lead-free package.

APPLICATIONS

- Handheld Electronics
- Flash Light
- Lighting

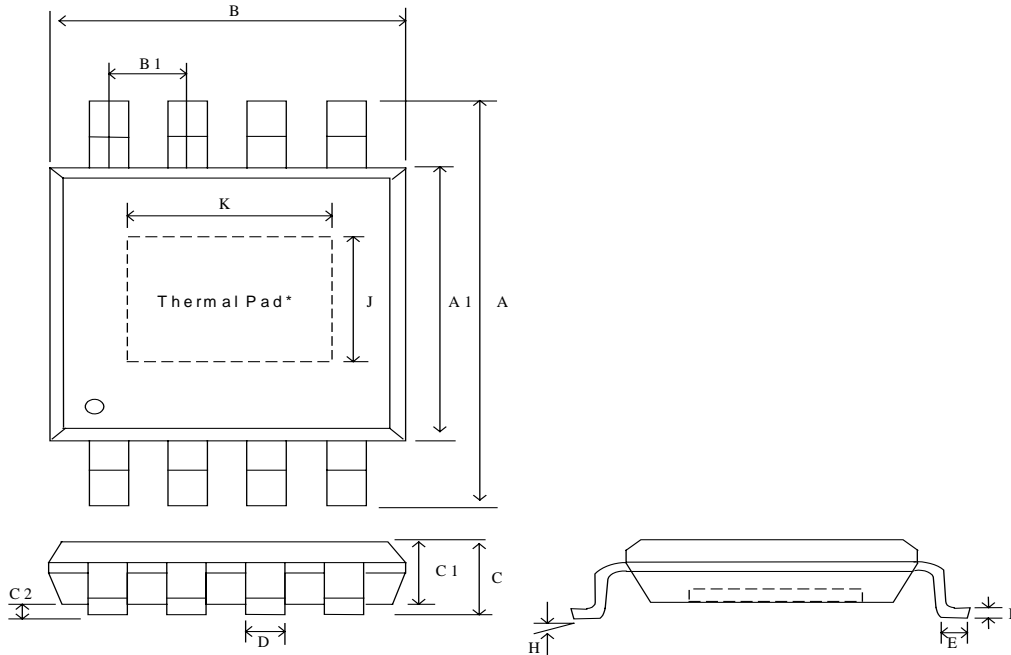
PACKAGE DIMENSIONS

5-LEAD TO-252



Symbol	Dimension in inch		Dimension in mm	
	Min.	Max.	Min.	Max.
A	0.087	0.094	2.20	2.40
A1	0.040	0.050	1.00	1.27
b	0.016	0.24	0.40	0.60
b2	0.205	0.213	5.20	5.40
c	0.017	0.023	0.43	0.58
c1	0.017	0.023	0.43	0.58
D	0.213	0.224	5.40	5.70
D1	0.150 (REF.)		3.80 (REF.)	
E	0.250	0.262	6.35	6.65
E1	0.150 (REF.)		3.80 (REF.)	
e	0.050 (TYP.)		1.27 (TYP.)	
e1	0.200 (TYP.)		5.08 (TYP.)	
H	0.313	0.338	7.94	8.6
L	0.055	0.070	1.40	1.78
L1	0.043	0.047	1.09	1.19
L2	0.050	0.060	1.30	1.50

**PACKAGE DIMENSIONS
8-LEAD SOP**



Symbol	Dimension in mm			Dimension in inch		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	5.70	6.00	6.30	0.224	0.236	0.248
A1	3.75	3.95	4.10	0.148	0.156	0.164
B	-	-	5.13	-	-	0.202
B1	-	1.27	-	-	0.050	-
C	-	-	1.80	-	-	0.071
C1	1.35	1.55	1.75	0.052	0.061	0.069
C2	0.10	-	0.25	0.001	-	0.004
D	0.31	0.41	0.51	0.012	0.016	0.020
E	0.30	0.50	0.70	0.012	0.020	0.028
F	0.10	0.15	0.25	0.004	0.006	0.010
J		2.23 REF			0.088 REF	
K		2.97 REF			0.117 REF	
H	0~8°			0~8°		

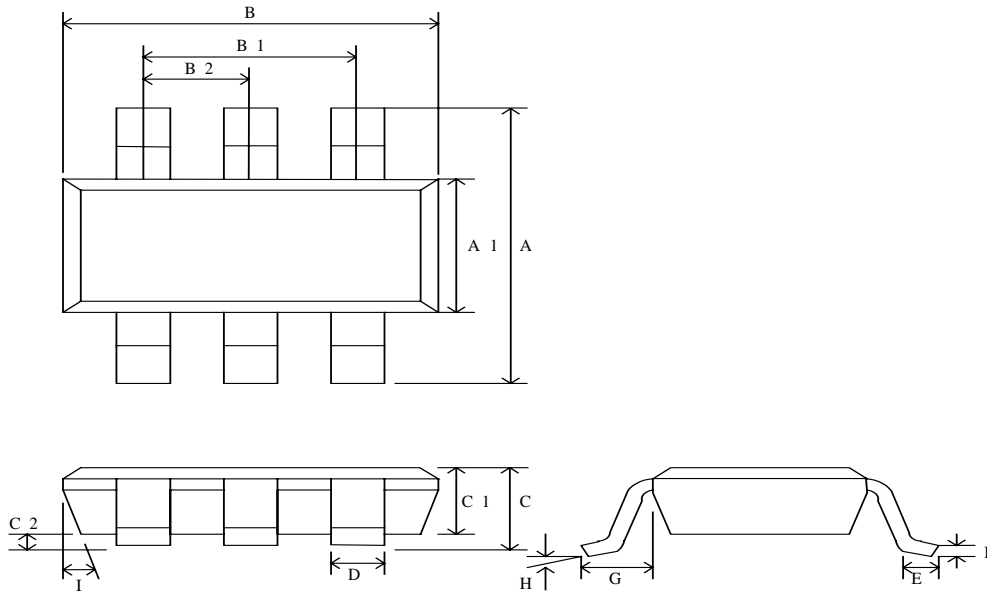
***Note :**

The thermal pad on the IC's bottom has to be mounted on the copper foil.

To eliminate the noise influence, the thermal pad is suggested to be connected to GND on PCB.

In addition, desired thermal conductivity will be improved, if a heat-conducting copper foil on PCB is soldered with thermal pad. The thermal pad enhances the power dissipation. As a result, a large amount of current can be sunk safely in one package.

PACKAGE DIMENSIONS
SOT23-6



Symbol	Dimension in mm			Dimension in inch		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	2.60	2.80	3.00	0.102	0.110	0.118
A1	1.40	1.575	1.60	0.055	0.062	0.063
B	2.70	2.85	3.00	0.106	0.112	0.118
B1		1.90(BSC)			0.075(BSC)	
B2		0.95(BSC)			0.037(BSC)	
C	0.95	1.20	1.45	0.037	0.047	0.057
C1	0.90	1.10	1.30	0.035	0.043	0.051
C2	0	0.075	0.150	0	0.003	0.06
D		0.40			0.015	
E	0.30	0.45	0.60	0.012	0.018	0.023
F	0.08	0.15	0.22	0.003	0.006	0.009
G		0.60(REF)				
H				0~8°		
I	5~15°			5~15°		