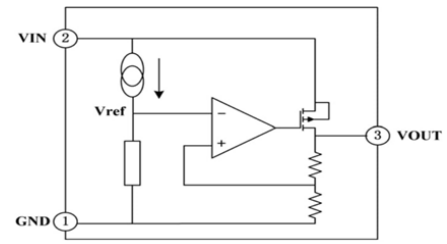


Features

- Low power consumption
- Low voltage drop
- Low temperature coefficient
- High input voltage
- Ultra low quiescent current: 1.5 μ A(typ.)
- Output voltage accuracy: tolerance $\pm 2\%$
- Output current: 100mA(typ.)

HF

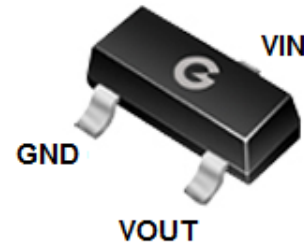


Typical Applications

- Battery-powered equipment
- Audio/Video equipment
- Communication equipment

Mechanical Data

- Case: SOT-23-3L
- Molding Compound: UL Flammability Classification Rating 94V-0
- Terminals: Matte tin-plated leads; solderability-per MIL-STD-202, Method 208



SOT-23-3L

Ordering Information

Part Number	Package	Shipping Quantity	Marking Code
BL7533-3L	SOT-23-3L	3000 pcs / Tape & Reel	7533

Maximum Ratings (@ $T_A = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Value	Unit
Supply Voltage	V_{IN}	-0.3 ~ +24	V

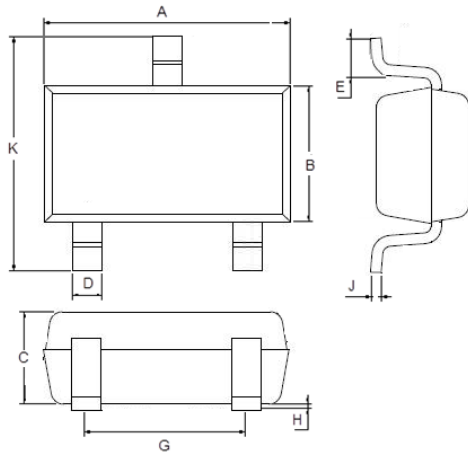
Thermal Characteristics

Parameter	Symbol	Value	Unit
Power Dissipation	P_D	0.2	W
Thermal Resistance Junction-to-Air	$R_{\theta JA}$	500	$^\circ\text{C/W}$
Operating Temperature Range	T_J	-40 ~ +85	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-50 ~ +125	$^\circ\text{C}$

Electrical Characteristics (@ $T_A = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Output Voltage	V_{OUT}	$V_{IN} = V_{OUT} + 2.0\text{V}$, $I_{OUT} = 10\text{mA}$	3.234	3.30	3.366	V
Output Current	I_{OUT}	$V_{IN} = V_{OUT} + 2.0\text{V}$	70	100	-	mA
Load Regulation	ΔV_{OUT}	$V_{IN} = V_{OUT} + 2.0\text{V}$ $1\text{mA} \leq I_{OUT} \leq 50\text{mA}$	-	25	60	mV
Voltage Drop	V_{DIF}	$I_{OUT} = 1\text{mA}$, $\Delta V_{OUT} = 2\%$	-	25	55	mV
Current Consumption	I_{SS}	No Load	-	1.5	3.0	μA
Line Regulation	$\Delta V_{OUT}/(\Delta V_{IN} \cdot V_{OUT})$	$V_{OUT} + 1\text{V} \leq V_{IN} \leq 24\text{V}$ $I_{OUT} = 1\text{mA}$	-	-	0.2	%/V
Input Voltage	V_{IN}	-	-	-	24	V
Temperature Coefficient	$\Delta V_{OUT}/(\Delta T_A \cdot V_{OUT})$	$V_{IN} = V_{OUT} + 2.0\text{V}$, $I_{OUT} = 10\text{mA}$ $-40^\circ\text{C} \leq T_A \leq 85^\circ\text{C}$	-	100	-	ppm/ $^\circ\text{C}$

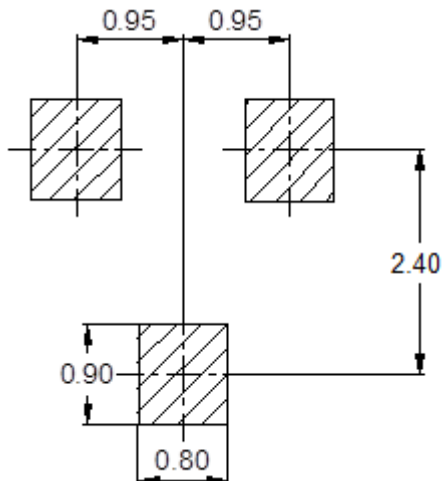
Package Outline Dimensions (Unit: mm)



SOT-23-3L		
Dimension	Min.	Max.
A	2.80	3.00
B	1.50	1.70
C	1.00	1.20
D	0.35	0.45
E	0.35	0.55
G	1.80	2.00
H	0.02	0.10
J	0.10	0.20
K	2.60	3.00

Package Outline Dimensions (Unit: mm)

SOT-23-3L



IMPORTANT NOTICE

Changzhou Galaxy Century Microelectronics (GME) reserves the right to make changes without further notice to any product information (copyrighted) herein to make corrections, modifications, improvements, or other changes. GME does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights, nor the rights of others.