

POWER MANAGEMENT

Description

The EZ5Z3L voltage converters are innovative two terminal devices that accept a regulated 5V input and reduce it to 3.3V over a range of 5mA to 250mA. The EZ5Z3L-ADJ is an adjustable three terminal version allowing output voltage trimming.

The EZ5Z3L is available in SOT-223, TO-220 and TO-92 packages.

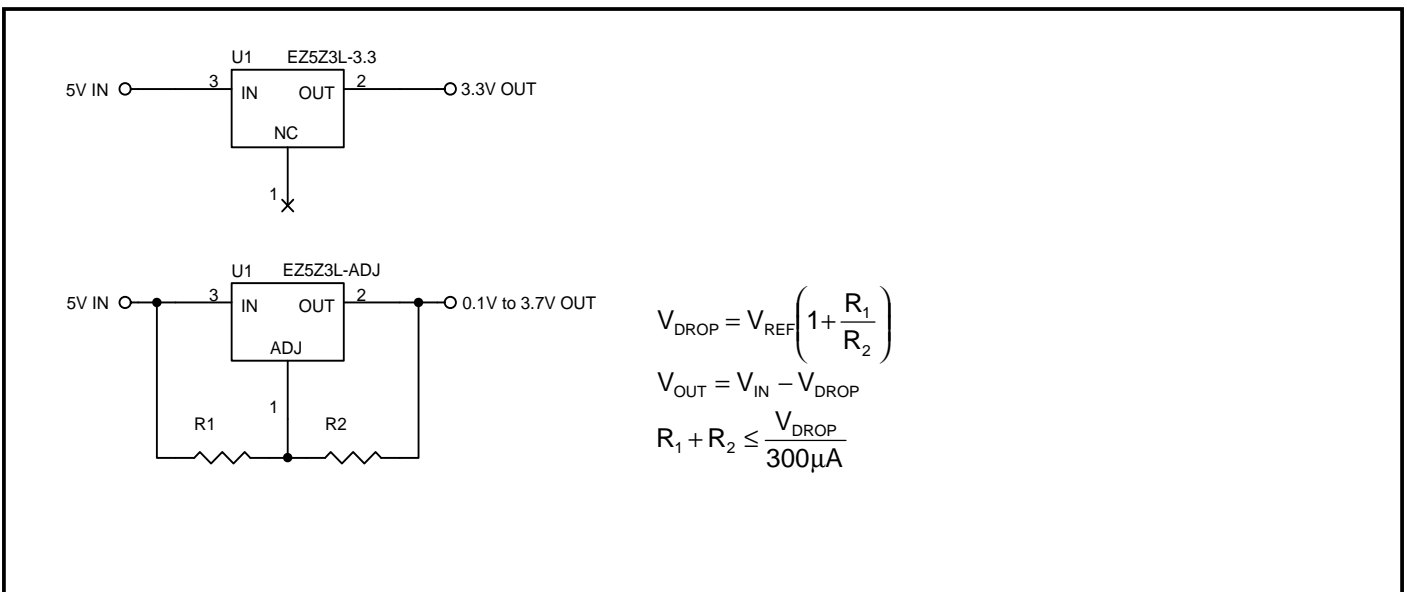
Features

- ◆ External components not required
- ◆ Heatsink not required
- ◆ 2 simple connections
- ◆ 250mA output current
- ◆ Generates no EMI or spikes
- ◆ Drops 5V to 3.3V, ADJ
- ◆ Industrial temperature range
- ◆ SOT-223, TO-220 and TO-92 packages

Applications

- ◆ Cellular Telephones
- ◆ Instrumentation
- ◆ Peripheral Cards
- ◆ Medical Equipment

Typical Application Circuits



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Absolute Maximum Ratings

Parameter	Symbol	Maximum	Units
Power Dissipation	P_D	0.5	W
Continuous Current	I_C	250	mA
Thermal Resistance Junction to Ambient SOT-223 TO-220 TO-92	θ_{JA}	62 50 132	$^{\circ}C/W$
Thermal Resistance Junction to Case SOT-223 TO-220 TO-92	θ_{JC}	15 15 66	$^{\circ}C/W$
Operating Ambient Temperature Range	T_A	-40 to 125	$^{\circ}C$
Operating Junction Temperature Range	T_J	-40 to 150	$^{\circ}C$
Storage Temperature Range	T_{STG}	-65 to 150	$^{\circ}C$
Lead Temperature (Soldering) 10 Sec.	T_{LEAD}	300	$^{\circ}C$
ESD Rating (Human Body Model)	V_{ESD}	2	kV

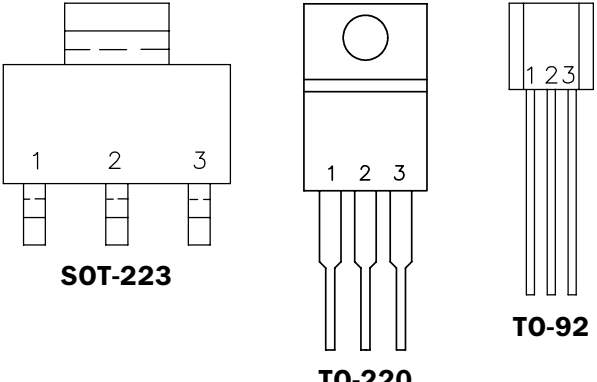
Electrical Characteristics

Unless specified: $T_A = 25^{\circ}C$. Values in **bold** apply over the full operating ambient temperature range.

Parameter	Symbol	Conditions	Min	Typ	Max	Units
EZ5Z3L-3.3	V_{OUT}	$V_{IN} = 5V, I_{OUT} = 125mA$	3.20	3.30	3.39	V
		$V_{IN} = 5V, 5mA \leq I_{OUT} \leq 250mA$	3.13		3.46	
EZ5Z3L-ADJ	V_{REF}	$V_{IN} = 5V, I_{OUT} = 125mA$	1.21	1.25	1.28	V
		$V_{IN} = 5V, 5mA \leq I_{OUT} \leq 250mA$	1.18		1.31	
Load Regulation	$REG_{(LOAD)}$	$V_{IN} = 5V, I_{OUT} = 5mA \text{ to } 250mA$		0.5	1.0	$\%V_{OUT}$
Temperature Coefficient	T_C	$V_{IN} = 5V, I_{OUT} = 125mA$		0.005	0.01	$\%V_{OUT}/^{\circ}C$

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Pin Configurations



Pin	Function (-3.3)	Function (-ADJ)
1	NC	ADJ
2	OUT	OUT
3	IN	IN

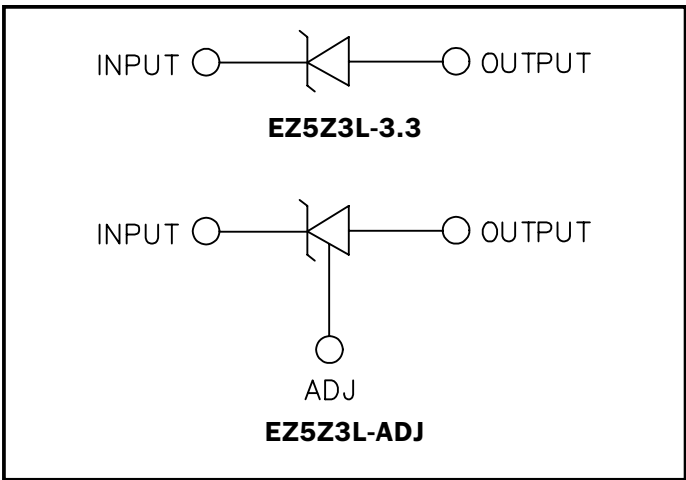
TAB is OUT for SOT-223, TO-220

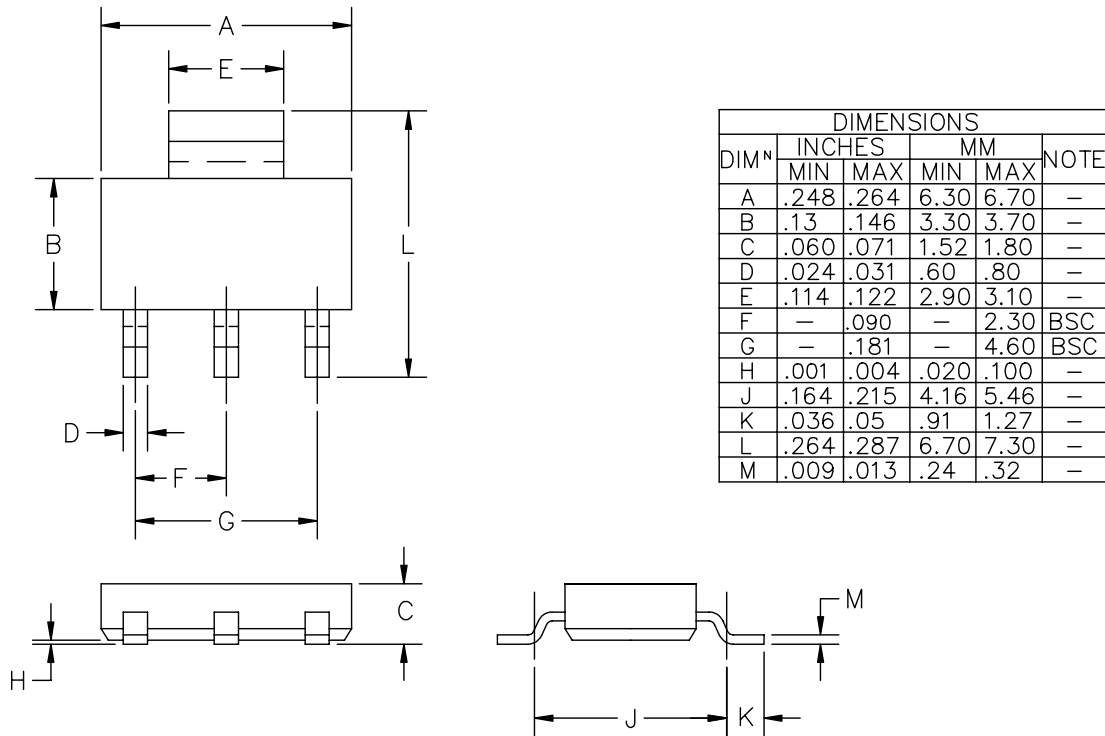
Ordering Information

Device	V _{IN}	Package	V _{OUT} Volts
EZ5Z3L-S3.3.TR EZ5Z3L-SADJ.TR	5	SOT-223 ⁽¹⁾	3.3 ADJ
EZ5Z3L-T3.3 EZ5Z3L-TADJ	5	TO-220 ⁽²⁾	3.3 ADJ
EZ5Z3L-Z3.3.TR EZ5Z3L-ZADJ.TR	5	TO-92 ⁽³⁾	3.3 ADJ

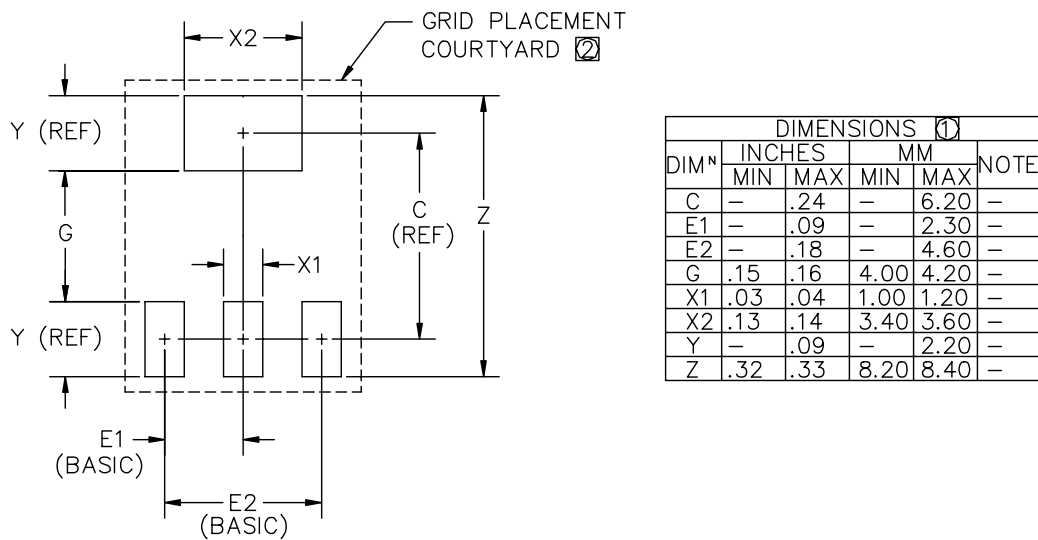
Notes:
 (1) Only available in tape and reel packaging. A reel contains 2500 devices.
 (2) Only available in tube packaging. A tube contains 50 devices.
 (3) Available in tape and reel packaging (a reel contains 3000 devices) or ammo pack (suffix TA, an ammo pack contains 2000 devices).

Symbol



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Outline Drawing - SOT-223


CONTROLLING DIMENSIONS: MILLIMETERS.

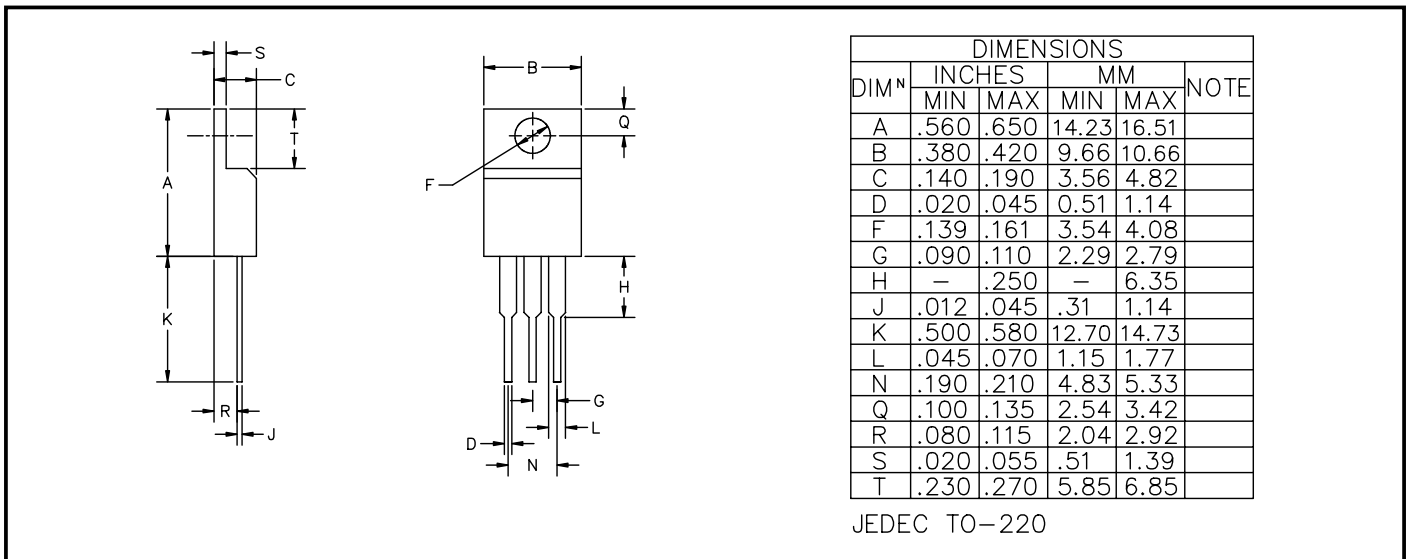
Land Pattern - SOT-223


② GRID PLACEMENT COURTYARD IS 18 x 14 ELEMENTS (9 mm X 7mm) IN ACCORDANCE WITH THE INTERNATIONAL GRID DETAILED IN IEC PUBLICATION 97.

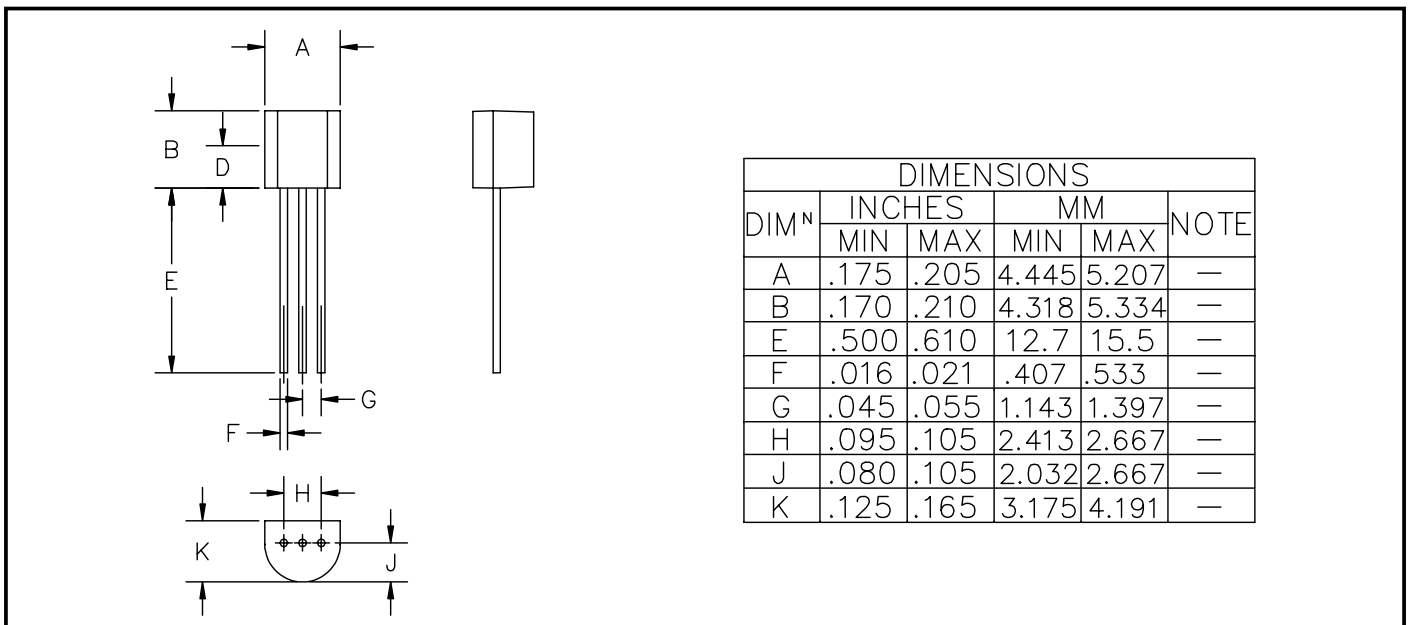
① CONTROLLING DIMENSION: MILLIMETERS

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Outline Drawing - TO-220



Outline Drawing - TO-92



Contact Information

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