

November 22, 1999

ELECTRICAL CHARACTERISTICS

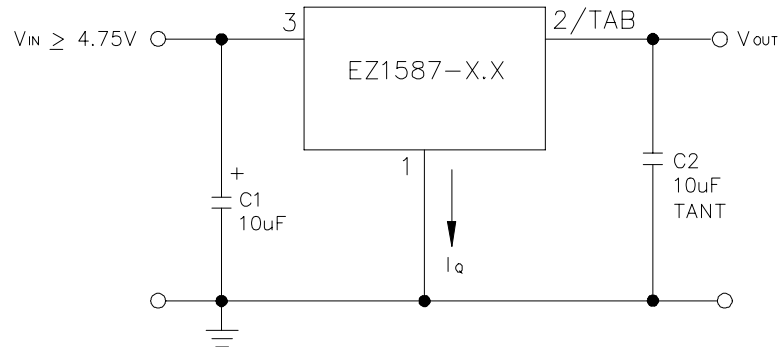
 Unless otherwise specified, Adj $V_{IN} = 2.75$ to $7.0V$ and ADJ $I_O = 10mA$ to $3.0A$;
 Fixed ($V_{OUT} + 1.5$) to $7.0V$ and Fixed $I_O = 0mA$ to $3.0A$

Parameter	Symbol	Test Conditions			Test Limits			Units	
		V_{IN}	I_O	$T_J^{(5)}$	Min	Typ	Max		
Output Voltage ⁽¹⁾	V_O	5V	10mA	25°C	0.99 V_O	V_O	1.01 V_O	V	
Fixed Voltage Version				O.T.	0.98 V_O	V_O	1.02 V_O		
Reference Voltage ⁽¹⁾	V_{REF}	5V	10mA	25°C	1.238	1.250	1.262	V	
Adj Voltage Version				O.T.	1.225	1.250	1.275		
Line Regulation ⁽¹⁾	$REG_{(LINE)}$			25°C		0.005	0.2	%	
Fixed Voltage Version				0mA		O.T.	0.035		0.2
Adj Voltage Version				10mA					
Load Regulation ⁽¹⁾	$REG_{(LOAD)}$	5V		25°C		0.05	0.3	%	
				O.T.		0.2	0.4		
Dropout Voltage ⁽²⁾	V_D			25°C		1		V	
EZ1587				O.T.		1.1	1.3		
Current Limit	I_{CL}			O.T.	3.1	4.5		A	
Quiescent Current	I_Q	5V		O.T.		10	13	mA	
Fixed Voltage Version									
Temperature Coefficient	T_C			O.T.		0.004	0.02	%/°C	
Adjust Pin Current	I_{ADJ}			25°C		55		μA	
				O.T.			90		
Adjust Pin Current Change	ΔI_{ADJ}			O.T.		0.2	5	μA	
Temperature Stability	T_S	5V	0.5A	O.T.		0.5		%	
Minimum Load Current	I_O	5V		O.T.		5	10	mA	
Adj Voltage Version									
RMS Output Noise ⁽³⁾	V_N			25°C		0.003		% V_O	
Ripple Rejection Ratio ⁽⁴⁾	R_A	5V	3.0A	O.T.	60	72		dB	

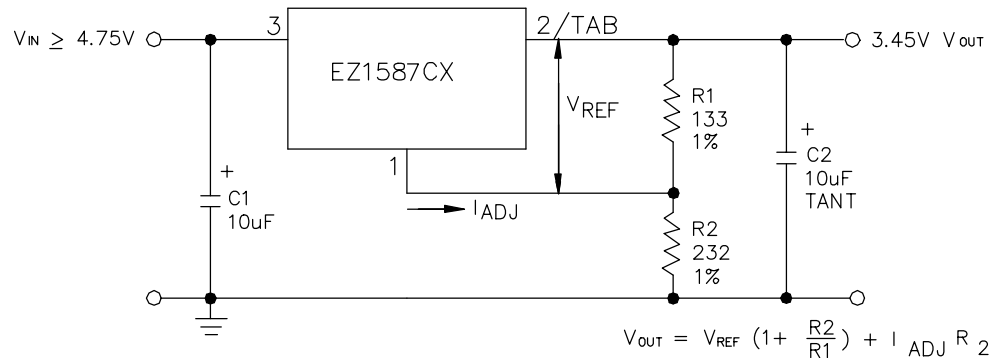
NOTES:

- (1) Low duty cycle pulse testing with Kelvin connections required.
- (2) ΔV_{OUT} , $\Delta V_{REF} = 1\%$
- (3) Bandwidth of 10 Hz to 10 kHz.
- (4) 120 Hz input ripple, (C_{ADJ} for ADJ = 25μF).
- (5) Over Temp. (O.T.) = over specified operating junction temperature range.

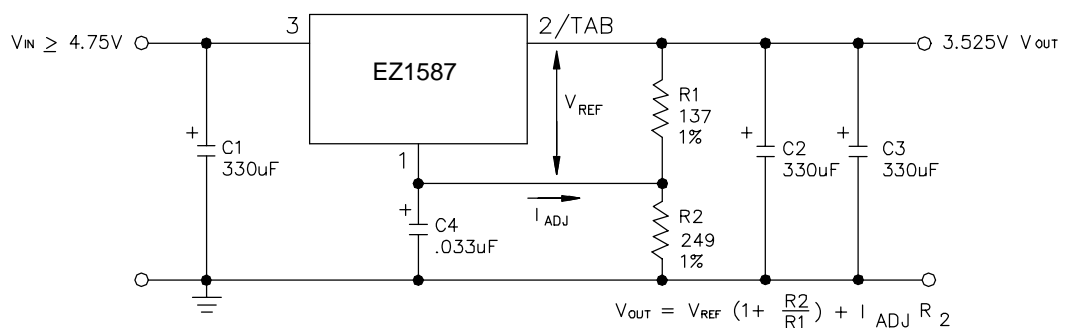
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TYPICAL APPLICATIONS
FIXED VOLTAGE REGULATOR ⁽¹⁾⁽²⁾


- (1) C1 NEEDED IF DEVICE IS FAR FROM FILTER CAPACITORS.
 (2) C2 REQUIRED FOR STABILITY.

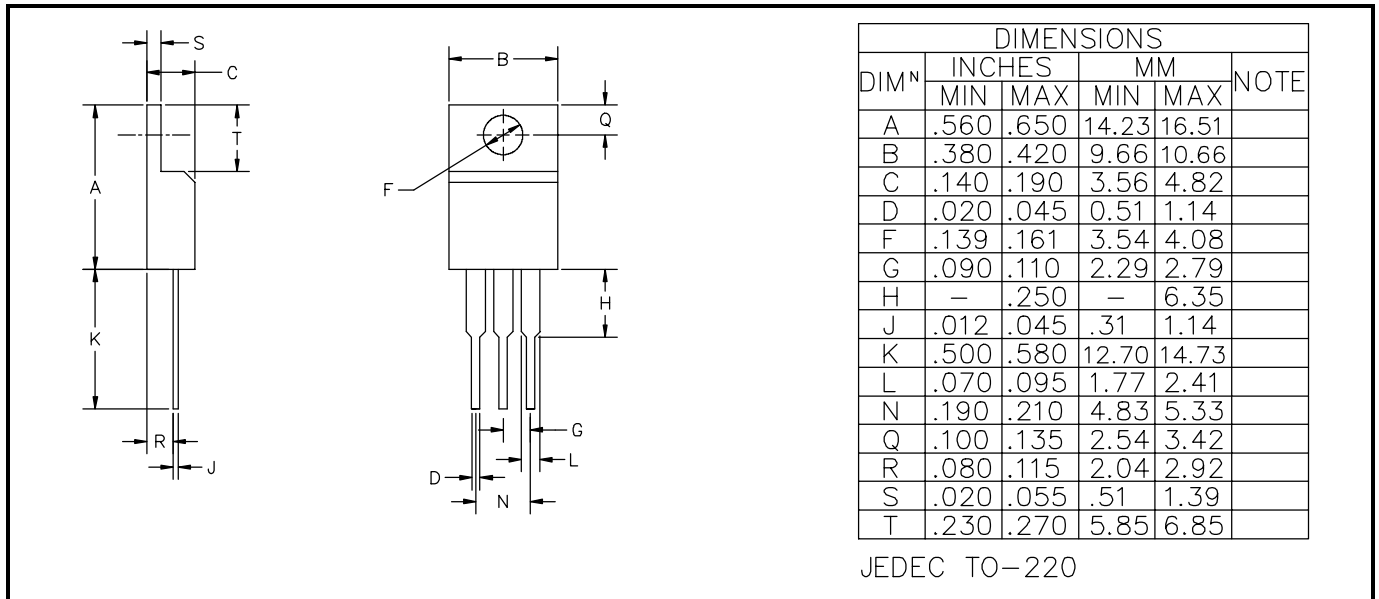
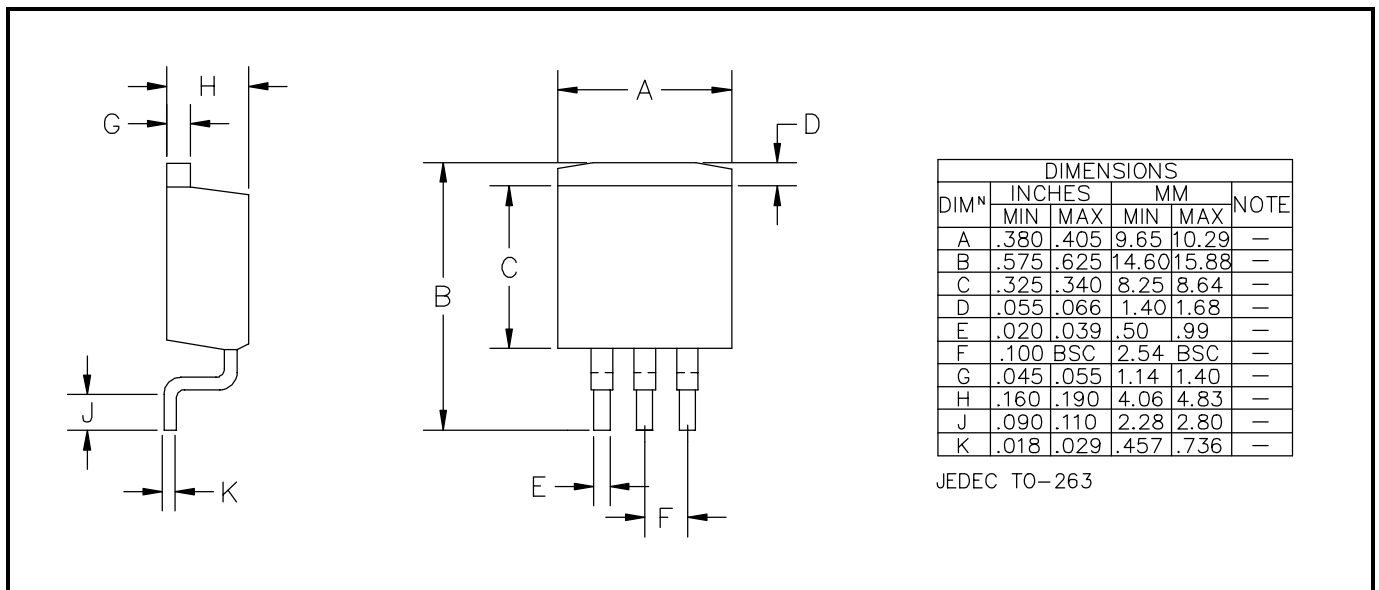
ADJUSTABLE VOLTAGE REGULATOR ⁽¹⁾⁽²⁾


- (1) C1 NEEDED IF DEVICE IS FAR FROM FILTER CAPACITORS.
 (2) C2 REQUIRED FOR STABILITY.

**RECOMMENDED CIRCUIT FOR THE INTEL
 PENTIUM PROCESSOR® - P54C-VRE**


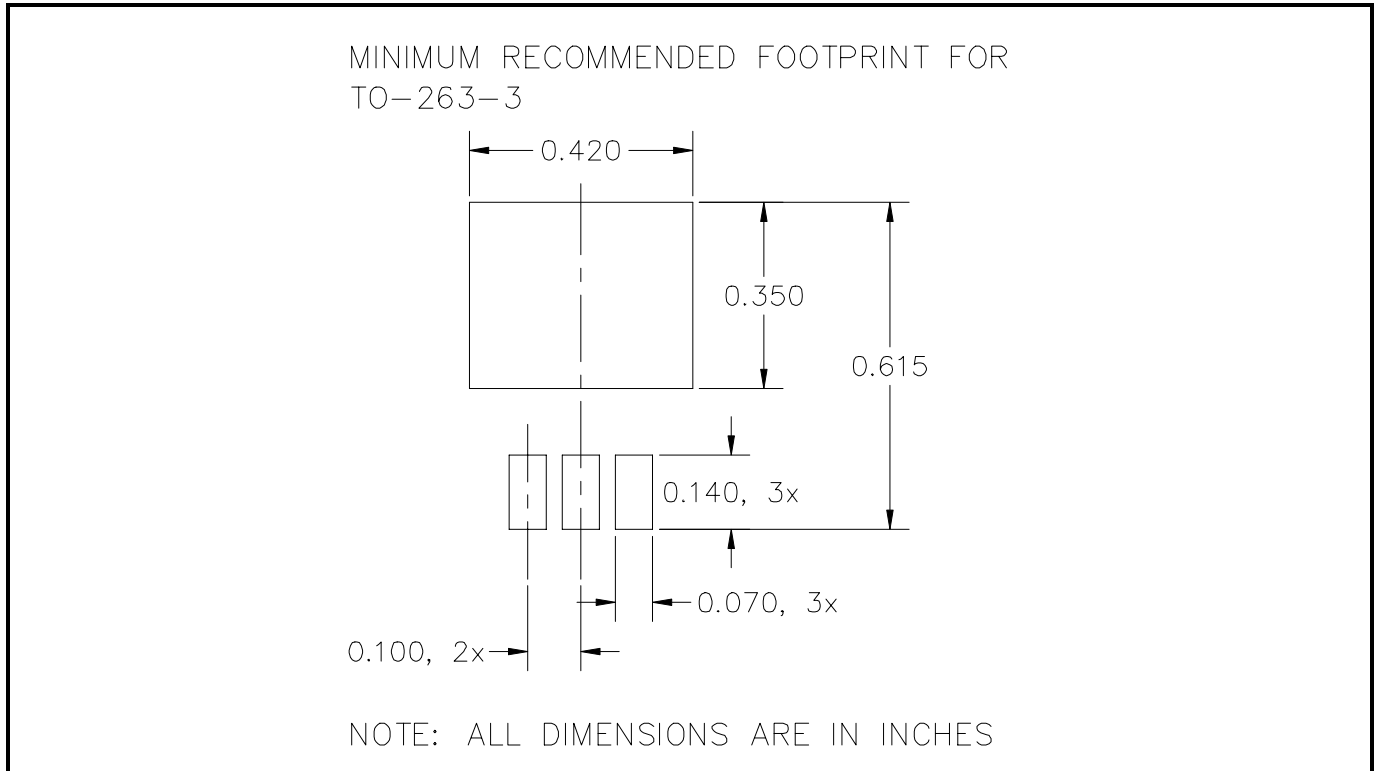
- (1) C1 NEEDED IF DEVICE IS FAR FROM FILTER CAPACITORS.
 (2) C2 AND C3 REQUIRED FOR STABILITY.
 (3) C1 = C2 = C3 = 330µF, 200m OHM ESR

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DEVICE OUTLINE - TO-220

DEVICE OUTLINE - TO-263


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LAND PATTERN - TO-263



ECN99-734