

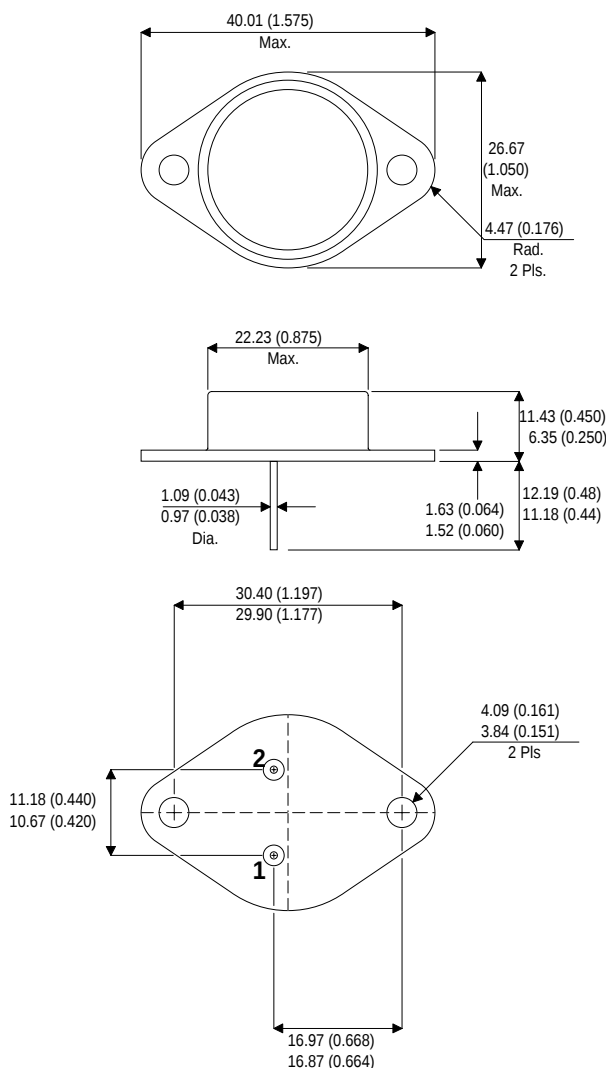
ELECTRICAL CHARACTERISTICS ($T_J = 25^\circ\text{C}$ Unless otherwise stated)

Parameter	Output Voltage	Test Conditions ^{1,2}		Min.	Typ.	Max.	Unit
V_O ⁴ Output Voltage	3.3	$V_{IN} - V_{OUT} = 6.3\text{V}$	$I_O = 10\text{mA}$	3.267	3.3	3.333	V
		$I_O = 10\text{mA}$ to 3A	$T_J = \text{Over Temp}^3$	3.234	3.3	3.366	
	5	$V_{IN} - V_{OUT} = 8\text{V}$	$I_O = 10\text{mA}$	4.95	5	5.05	
		$I_O = 10\text{mA}$ to 3A	$T_J = \text{Over Temp}^3$	4.90	5	5.10	
	12	$V_{IN} - V_{OUT} = 15\text{V}$	$I_O = 10\text{mA}$	11.88	12	12.12	
		$I_O = 10\text{mA}$ to 3A	$T_J = \text{Over Temp}^3$	11.76	12	12.24	
V_{REF} ⁴ Reference Voltage	ADJ.	$V_{IN} - V_{OUT} = V_O + 3\text{V}$	$I_O = 10\text{mA}$	1.238	1.25	1.262	V
		$I_O = 10\text{mA}$ to 3A	$T_J = \text{Over Temp}^3$	1.225	1.25	1.270	
$REG_{(LINE)}$ ⁴ Line Regulation	$V_{IN} - V_{OUT} = 1.5$ to 15V $I_O = 10\text{mA}$		$T_J = 25^\circ\text{C}$		0.015	0.2	%
			$T_J = \text{Over Temp}^3$		0.035		
	$V_{IN} - V_{OUT} = 1.5$ to 35V $T_J = \text{Over Temp}^3$		$I_O = 10\text{mA}$		0.05	0.6	%
$REG_{(LOAD)}$ ⁴ Load Regulation	$V_{IN} - V_{OUT} = 3\text{V}$		$T_J = 25^\circ\text{C}$		0.1	0.3	%
	$V_{IN} - V_{OUT} = 3\text{V}$		$T_J = \text{Over Temp}^3$		0.2	0.4	
V_D Dropout Voltage	$\Delta V_{OUT}, \Delta V_{REF} = 1\%$		$T_J = \text{Over Temp}^3$		1.3	1.5	V
I_{CL} Current Limit	$V_{IN} - V_{OUT} = 5\text{V}$		$T_J = \text{Over Temp}^3$	3.2	4.0		A
	$V_{IN} - V_{OUT} = 25\text{V}$		$T_J = \text{Over Temp}^3$	0.2		0.5	
I_Q Quiescent Current	$V_{IN} - V_{OUT} = 35\text{V}$		$T_J = \text{Over Temp}^3$			10	mA
$REG_{(THERM)}$ Thermal Regulation	$t_p = 30\text{ms}$		$T_J = 25^\circ\text{C}$		0.002	0.01	% / W
I_{PIN} Adjust Pin Current	$T_J = 25^\circ\text{C}$				55		μA
	$T_J = \text{Over Temp}^3$					120	
ΔI_{PIN} Adjust Pin Current Change	$T_J = \text{Over Temp}^3$				0.2	5	μA
T_S Temperature Stability	$V_{IN} - V_{OUT} = 5\text{V}$ $T_J = \text{Over Temp}^3$		$I_O = 0.5\text{A}$		0.5		%
I_O Minimum Load Current	$V_{IN} - V_{OUT} = 25\text{V}$ $T_J = \text{Over Temp}^3$		$I_O = 0.5\text{A}$		5	10	mA
V_N RMS Output Noise ⁵	$T_J = 25^\circ\text{C}$				0.003		% V_O
R_A Ripple Rejection Ratio ⁶	$V_{IN} - V_{OUT} = 3\text{V}$ $T_J = \text{Over Temp}^3$		$I_O = 3\text{A}$	60	75		dB

Notes

- Test Conditions unless otherwise stated: $V_{IN} = 1.5$ to 35V, or Maximum Input, whichever is less.
 $I_O = 10\text{mA}$ to 3A.
- These specifications are only applicable for power dissipations of 30 Watts over a limited range of $V_{IN} - V_{OUT}$.
- Over Temp. = Over specified Junction Temperature Range (See Absolute Maximum Ratings).
- Low duty cycle pulse test with Kelvin connections required. Changes in output voltage are covered under the specification for thermal regulation.
- Bandwidth of 10Hz to 10kHz.
- 120Hz input ripple, 15V = 64dB min. C_{OUT} (C_{ADJ}) = 25 μF .

K Package (TO-3)



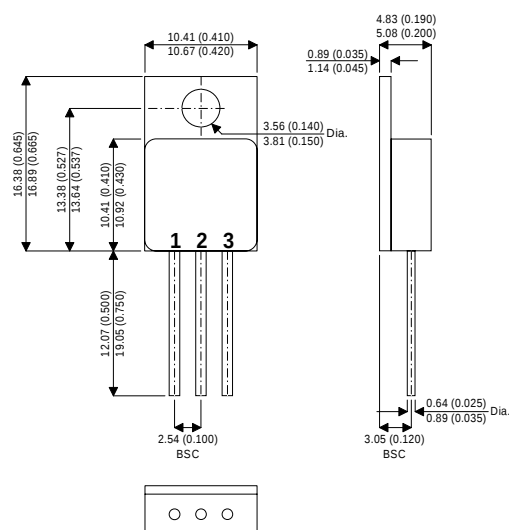
LT1085

Pin	Fixed	Adjustable
1	COMMON	ADJUST
2	INPUT	INPUT
Case is OUTPUT		

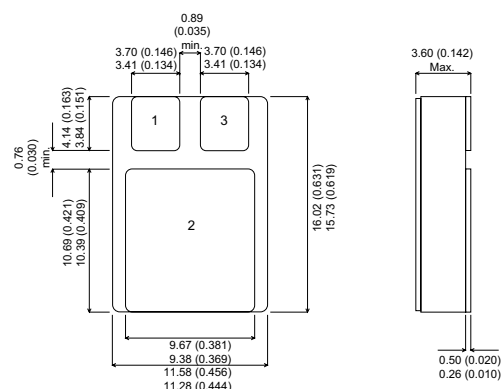
LT1085G

Pin	Fixed	Adjustable
1	COMMON	ADJUST
2	OUTPUT	OUTPUT
3	INPUT	INPUT
Case is OUTPUT		

G & IG Packages (TO-257)



SMD1 PACKAGE



LT1085SMD

Pin	Fixed	Adjustable
1	COMMON	ADJUST
2	OUTPUT	OUTPUT
3	INPUT	INPUT

LT1085IG

Pin	Fixed	Adjustable
1	COMMON	ADJUST
2	OUTPUT	OUTPUT
3	INPUT	INPUT
Case is ISOLATED		