

LT1083/84/85 Fixed

ABSOLUTE MAXIMUM RATINGS

Power Dissipation	Internally Limited
Input Voltage (Note 1)	30V
Operating Input Voltage	
3.3V, 3.6V Devices	20V
5V Devices	20V
12V Devices	25V
Operating Junction Temperature Range	
"C" Grades	
Control Section	0°C to 125°C
Power Transistor	0°C to 150°C
"M" Grades	
Control Section	-55°C to 150°C
Power Transistor	-55°C to 200°C

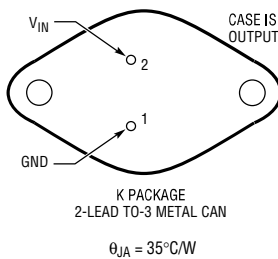
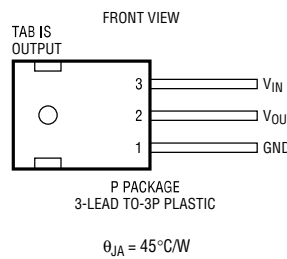
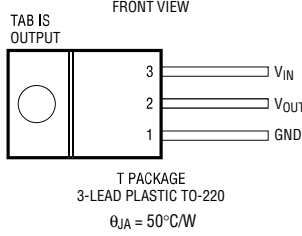
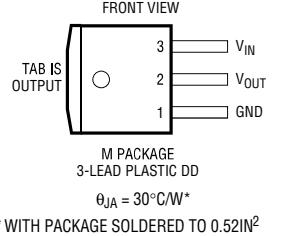
Storage Temperature Range	-65°C to 150°C
Lead Temperature (Soldering, 10 sec)	300°C

Note 1: Although the devices maximum operating voltage is limited, (20V for a 3V, 5V device, and 25V for a 12V device) the devices are guaranteed to withstand transient input voltages up to 30V. For input voltages greater than the maximum operating input voltage some degradation of specifications will occur. For input/output voltage differentials greater than 15V, a minimum external load of 5mA is required to maintain regulation.

PRECONDITIONING

100% Thermal Limit Functional Test.

PACKAGE/ORDER INFORMATION

 K PACKAGE 2-LEAD TO-3 METAL CAN θ_{JA} = 35°C/W	ORDER PART NUMBER		 P PACKAGE 3-LEAD TO-3P PLASTIC θ_{JA} = 45°C/W	ORDER PART NUMBER
	LT1083CK-5	LT1084MK-5		LT1083CP-5
	LT1083CK-12	LT1084MK-12		LT1083CP-12
	LT1083MK-5	LT1085CK-5		LT1084CP-5
	LT1083MK-12	LT1085CK-12		LT1084CP-12
	LT1084CK-5	LT1085MK-5		
	LT1084CK-12	LT1085MK-12		
 T PACKAGE 3-LEAD PLASTIC TO-220 θ_{JA} = 50°C/W	ORDER PART NUMBER		 M PACKAGE 3-LEAD PLASTIC DD θ_{JA} = 30°C/W*	ORDER PART NUMBER
	LT1084CT-3.3	LT1085CT-3.3		LT1085CM-3.3
	LT1084CT-5	LT1085CT-5		LT1085CM-3.6
	LT1084CT-12	LT1085CT-12		
	LT1085CT-3.3			
	LT1085CT-3.6			
	LT1085CT-5			
	LT1085CT-12			

Consult factory for Industrial grade parts.

ELECTRICAL CHARACTERISTICS

PARAMETER	CONDITIONS		MIN	TYP	MAX	UNITS
Output Voltage	LT1084-3.3	I _{OUT} = 0mA, T _J = 25°C, V _{IN} = 8V (K Package Only)	3.270	3.300	3.330	V
		0 ≤ I _{OUT} ≤ 5A, 4.8V ≤ V _{IN} ≤ 15V (Note 8)	3.235	3.300	3.365	V
	LT1085-3.3	V _{IN} = 5V, I _{OUT} = 0mA, T _J = 25°C (K Package Only)	3.270	3.300	3.330	V
		4.8V ≤ V _{IN} ≤ 15V, 0 ≤ I _{OUT} ≤ 3A (Note 8)	3.235	3.300	3.365	V
	LT1085-3.6	V _{IN} = 5V, I _{OUT} = 0mA, T _J = 25°C (K Package Only)	3.564	3.600	3.636	V
		5V ≤ V _{IN} ≤ 15V, 0 ≤ I _{OUT} ≤ 3A (Note 8)	3.500		3.672	V
		5V ≤ V _{IN} ≤ 15V, 0 ≤ I _{OUT} ≤ 3A, T _J ≥ 0°C (Note 8)	3.528		3.672	V