



Quality System for producing discrete semiconductor devices and integrated circuits conforms to the requirements of ISO 9002-96

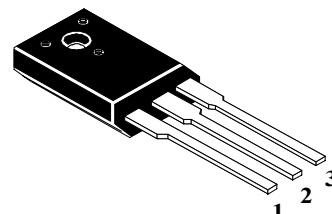
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THREE-TERMINAL POSITIVE VOLTAGE REGULATOR IC

FEATURES:

- OUTPUT CURRENT IN EXCESS OF 1A;
- NO EXTERNAL COMPONENTS REQUIRED;
- INTERNAL SHORT CIRCUIT CURRENT LIMITING;
- - INTERNAL THERMAL OVERLOAD PROTECTION;
- OUTPUT TRANSISTOR SAFE-AREA COMPENSATION;
- OUTPUT VOLTAGE OFFERED IN 4% TOLERANCE

TO-126



Pin #	Symbol	Function
1	IN	Input
2	GND	Ground
3	OUT	Output

ABSOLUTE MAXIMUM RATINGS (Ta= 25°C)

Characteristic	Symbol	Unit	Value
Input Voltage	V _{in}	V	35
Maximum Dissipated Power (with heat sink)	P _{tot(max)}	W	12
Maximum Dissipated Power (without heat sink)	P _{tot(max)}	W	1.25
Thermal Resistance Junction to Case	θ _{jC}	°C/W	7.5
Thermal Resistance, Junction to Air	θ _{jA}	°C/W	100
Operating Junction Temperature Range	T _j	°C	0 to 150
Operating Ambient Temperature Range	T _a	°C	-10 to 70

ELECTRICAL CHARACTERISTICS

(V_{in} =15V, I_o=0.5A, C_i =0.33μF, C_o = 0.1μF, T_j =0 to + 125°C, unless otherwise noted.)

Characteristic	Symbol	Norm			Unit
		Min	Typ	Max	
Output Voltage (T _j =25°C)	V _o	8.65		9.35	V
Output Voltage (5.0mA ≤ I _o ≤ 1.0A, P _o ≤12W) 11.5V ≤ V _{in} ≤ 24V	V _o	8.55		9.45	V
Line Regulation (T _j =+25°C) 11.5V ≤ V _{in} ≤ 26 V 11.5V ≤ V _{in} ≤ 17 V	Regline			180 90	mV
Load Regulation (T _j =+25°C) 5.0mA ≤ I _o ≤ 1.0A 0.25A ≤ I _o ≤ 0.75A	Regload			180 90	mV
Quiescent Current (T _j =+25°C)	I _b			6.0	mA
Quiescent Current Change 11,5 V ≤ V _{in} ≤ 26 V 5 mA ≤ I _o ≤ 1.0 A	Δ I _b			1.0 0.5	mA
Dropout Voltage (T _j =+25°C)	V _i -V _o		2.0		V
Short Circuit Current Limit (T _a =+25°C), V _{in} =35 V	I _{sc}		0.3		A
Peak Output Current (T _j =+25°C)	I _{max}		1.5		A
Average Temperature Coefficient of Output Voltage	TCV _o		0.8		mV/°C