

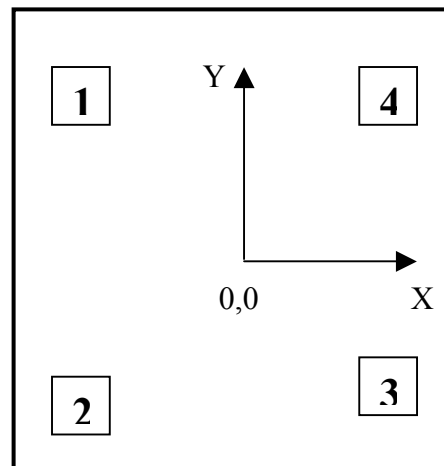
7808	CHIP FOR THREE-TERMINAL POSITIV VOLTAGE REGULATOR IC
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Features:

- ◆ Output Current in Excess of 1.5A ($T_j=25^{\circ}\text{C}, P_D \leq 15\text{W}$)
- ◆ No External Components Required
- ◆ Internal Short Circuit Current Limiting
- ◆ Internal Thermal Overload Protection
- ◆ Output Transistor Safe-Area Compensation
- ◆ Output Voltage Offered in 4% Tolerance

Physical Characteristics:

Wafer Diameter.....	100±0,5mm
Wafer Thickness.....	280±20 µm
Die size.....	1.4 x 1.9 mm ²
Scribe Width.....	100 µm
Metallization Bottom.....	Ti-Ni-Ag
	Ti-Ni – 0.5-0.7 µm
	Ag - 0.5-0.7 µm
Passivation.....	PSG



- ◆ Maximum Input Voltage – 36V
- ◆ Operation Junction Temperature Range – -40°C~125°C

Pad #	Pad name	Discription	Bond Pad (μm)	X	Y
1	IN	Input	230x230	-610	247
2	GND	Ground	230x230	-610	-626
3	OUT	Output	230x230	372	-560
4	OUT	Output	230x230	372	247

ELECTRICAL CHARACTERISTICS CHIPS ON WAFER

($V_{in}=14V$, $I_o=0.5A$, $C_i=0.33\mu F$, $C_o=0.1\mu F$, $T_j = 25^{\circ}C$, unless otherwise noted.)

Characteristic	Symbol	Test Condition	Min	Max	Unit
Output Voltage	V _O		7.7	8.3	V
Output Voltage	V _O	5.0mA ≤ I _O ≤ 1.0A; 10.5V ≤ V _{IN} ≤ 23V 0°C ≤ T _J ≤ 125°C	7.6	8.4	V
Line Regulation	ΔV _V	10.5V ≤ V _{IN} ≤ 25V; 11V ≤ V _{IN} ≤ 17V		160 80	mV
Load Regulation	ΔV _I	5.0mA ≤ I _O ≤ 1.5A 0.25A ≤ I _O ≤ 0.75A		160 80	mV
Quiescent Current	I _b			8.0	mA
Quiescent Current Change	ΔI _b	10.5V ≤ V _{IN} ≤ 25V, 5mA ≤ I _O ≤ 1.0A		1.0 0.5	mA