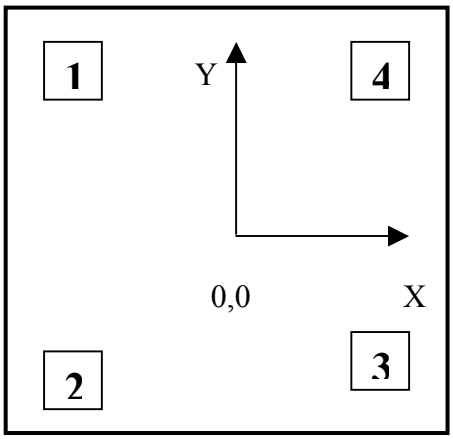
CHIP FOR THREE-TERMINAL POSITIVE VOLTAGE REGULATOR IC

FEATURES:

- Output Current in Excess of 1.5A ($P_D \leq 15W$)
- No External Components Required
- Internal Short Circuit Current Limiting
- Internal Termal Overload Protection
- Output Transistor Safe-Area Compensation
- Output Voltage Offered in 4% Tolerance

PHISICAL CHARACTERISTICS:

Wafer Diameter.....100±0.5mm
* Wafer Thickness.....280 … 420±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

* The wafer thickness shall be specified in a PO or Contract

Pad #	Discription	Characteristics	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

(Vin=10V, Io=0.5A, Ci=0.33μF, Co=0.1μF, Tj = 25°C, unless otherwise noted.)

Characteristic	Symbol	Test Condition	Min	Max	Unit
Output Voltage	Vo		4.8	5.2	V
Output Voltage	Vo	5.0mA≤Io≤1.0A; 7.0V≤Vin≤20V 0°C ≤Tj≤125°C	4.75	5.25	V
Line Regulation	ΔVv	7V ≤ Vin ≤ 25V; 8V ≤ Vin ≤ 12V	-	100 50	mV
Load Regulation	ΔVi	5.0mA≤Io≤1.5A 0.25A≤Io≤0.75A	-	100 50	mV
Quiescent Current	Ib		-	8.0	mA
Quiescent Current Change	ΔIb	7V ≤ Vin ≤ 25V, 5mA ≤ Io ≤ 1.0A	-	1.3 0.5	mA

Peak Output Current as a Function of Input/Output Differential Voltage