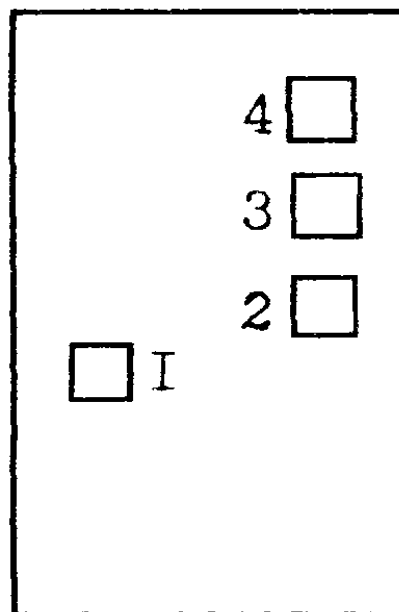




<b>IL2931Z-9</b> <b>IL2931T-9</b>	<b>Chip for low dropout positive voltage regulator IC</b>
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### Features:

- INPUT-TO-OUTPUT VOLTAGE DIFFERENTIAL OF < 0.6V @ 100mA;
- OUTPUT CURRENT IN EXCESS OF 100 mA;
- LOW BIAS CURRENT;
- 60V LOAD DUMP PROTECTION;
- -50V REVERSE TRANSIENT PROTECTION;
- INTERNAL CURRENT LIMITING WITH THERMAL SHUTDOWN;
- IDEALLY SUITED FOR BATTERY POWERED EQUIPMENT



### Physical Characteristics:

Wafer Diameter .....100 ± 0.5 mm  
 Wafer thickness ..... 350 ± 20 μm;  
 Die size ..... 2.0 x 1.4 mm<sup>2</sup>;  
 Scribe width .....90 μm

Metallization: Top ... Al – 1.4 ± 0.2 μm  
 bottom... Ti-Ni-Ag  
                   Ti - 0.12 ± 0.02μm  
                   Ni – 0.5 ± 0.1μm  
                   Ag – 0.6 ± 0.1μm

Pad #	Characteristics	Bond Pad (μm)	Note	Co-ordinates(bottom left co-ordinates corner), mm		Note
				X	Y	
1	output	180 x 180	- The numbers of Pads are simulated When packing Pads 3 and 4 are to be interconnected	0.070	0.850	Co-ordinates are given co-ordinates on "metallization layer"
2	GNG	180 x 180		1.085	1.200	
3	Input	180 x 180		1.060	1.480	
4	Input	180 x 180		1.060	1.740	

### ELECTRICAL CHARACTERISTICS CHIPS ON WAFER

(V<sub>in</sub>=16V, I<sub>o</sub>=10mA, C<sub>i</sub>=0.1μF, C<sub>o</sub>=100μF, T<sub>j</sub>=25°C, (Note 1).)

Characteristic	Symbol	Norm		Unit
		Min	Max	
Output Voltage V <sub>in</sub> =16V, I <sub>o</sub> =10mA V <sub>in</sub> =10V to 26V, I <sub>o</sub> ≤100mA	V <sub>o</sub>	8.58 8.15	9.43 9.85	V
Line Regulation V <sub>in</sub> =13V to 20V V <sub>in</sub> =10V to 26V	Reg <sub>line</sub>	- -	18 58	mV
Load Regulation (I <sub>o</sub> =5.0mA to 100mA)	Reg <sub>load</sub>	-	98	mV
Bias Current V <sub>in</sub> =16V, I <sub>o</sub> =100mA V <sub>in</sub> =10V to 26V, I <sub>o</sub> =10mA	I <sub>B</sub>	- -	27 0.9	mA
Dropout Voltage I <sub>o</sub> =10mA I <sub>o</sub> =100mA	V <sub>I</sub> -V <sub>o</sub>	- -	0.19 0.58	V
Over-Voltage Shutdown Threshold	V <sub>th(OV)</sub>	27	39	V
Output Voltage with Reverse Polarity Input (V <sub>in</sub> =-15V)	-V <sub>o</sub>	-0.25	-	V

Note 1: Low duty cycle pulse techniques are used during test to maintain junction temperature as to ambient as possible.