- Current Capa[illegible]
  - [illegible]OS29150/1/2/3: [illegible]
  - [illegible]OS29300/1/2/3: 3.0A
  - [illegible]OS29500/1/2/3: 5.0A
  - [illegible]OS29750/1/2/3: 7.5A
- Wide Input Voltage Range: 4~36V
- Low Dropout Voltage
- Low Ground Current
- Accurate 2% Tolerance
- Extremely Fast Transient Response
- Error Flag Signals [illegible]ut Out-of-Regulation
- Adjustable Output V[illegible]age
- Extended [illegible]mpera[illegible] Ranges [illegible]n -40° [illegible]12[illegible]
- Av[illegible]able i[illegible]O-220[illegible]d TO[illegible]7 [illegible]ac[illegible]es

- Automo[illegible]e El[illegible]ics
- Battery-[illegible]ve[illegible]d [illegible]uipment
- High-Effi[illegible]ienc[illegible] Li[illegible]ear Power Supplies
- High-Effi[illegible]ienc[illegible] Gr[illegible]en Computer Systems
- High-Effi[illegible] P[illegible]ulator fo[illegible] Switchin[illegible]

Maximum Input Voltage: VIN	- 0.3 to +40	V
Enable Input Voltage	- 0.3 to V_{IN}	V
Storage Temperature Range	-55 to 150	°C
Operating Junction Temperature Range	-40 to 125	°C
ESD Susceptibility, HBM	2000	V

(1) Stresses exceeding the absolute maximum ratings may damage the device. The device may not function or be operable above the recommended operating conditions and stressing the parts to these levels is not recommended. In addition, extended exposure to stresses above the recommended operating conditions may affect device reliability. The absolute maximum ratings are stress ratings only.

Package Thermal Resistance, $R_{\theta JC}$ (Juntion-to-case)	2 (TO-220) 2 (TO-263) 1.5 (TO-247) 3 (TO-252)	°C/W

Input Supply Voltage	+4.5 ~ +26	V
Operating ambient temperature	-40 to +85	°C

Ground Pin Current at Dropout (V_{IN} is 0.5V less than specified V_{OUT})	I_{GRNDDO}	COS2915x, I_{OUT}=10mA	-	1.9	-	mA
		COS2930x, I_{OUT}=10mA	-	1.9	-	
		COS2950x, I_{OUT}=10mA	-	1.9	-	
		COS2975x, I_{OUT}=10mA	-	1.9	-	
Current Limit	I_{LIM}	COS2915x, V_{OUT}=0V	-	2.0	2.5	A
		COS2930x, V_{OUT}=0V	-	4.0	4.8	
		COS2950x, V_{OUT}=0V	-	6.3	7.8	
		COS2975x, V_{OUT}=0V	-	9.5	11.7	
Ground Current in Shutdown			-	5	75	nA
Output Noise Voltage	e_n	C_L=10µF, I_L=100mA, 10Hz to 100kHz	-	390	-	µVrms
		C_L=33µF, I_L=100mA, 10Hz to 100kHz	-	211	-	µVrms

Reference Voltage		1.22	1.24	1.252	V
Reference Voltage Temperature Coefficient		-	20	-	ppm/°C
Adjust Pin Bias Current		-	-	100	pA

Output Low Voltage	V_{OL}		-	-	400	mV
Hysteresis			-	15	-	mV
Input Logic Voltage Low (OFF)			-	-	0.8	V
Input Logic Voltage High (ON)			2.4	-	-	V
Enable Pin Input Current		V_{EN}=0.8V	-	-	24	pA
		V_{EN}=26V	-	-	3	nA
Regulator Output Current in Shutdown		– 40 ° C ≤ T_J ≤ +125 ° C	-	-	18	µA

[illegible]

regulators suitable for all moderate to high-current voltage regulator applications. Their [illegible] to [illegible] make them especially valuable in bat[illegible] systems and as high efficiency noise filters in post-regulator applications.

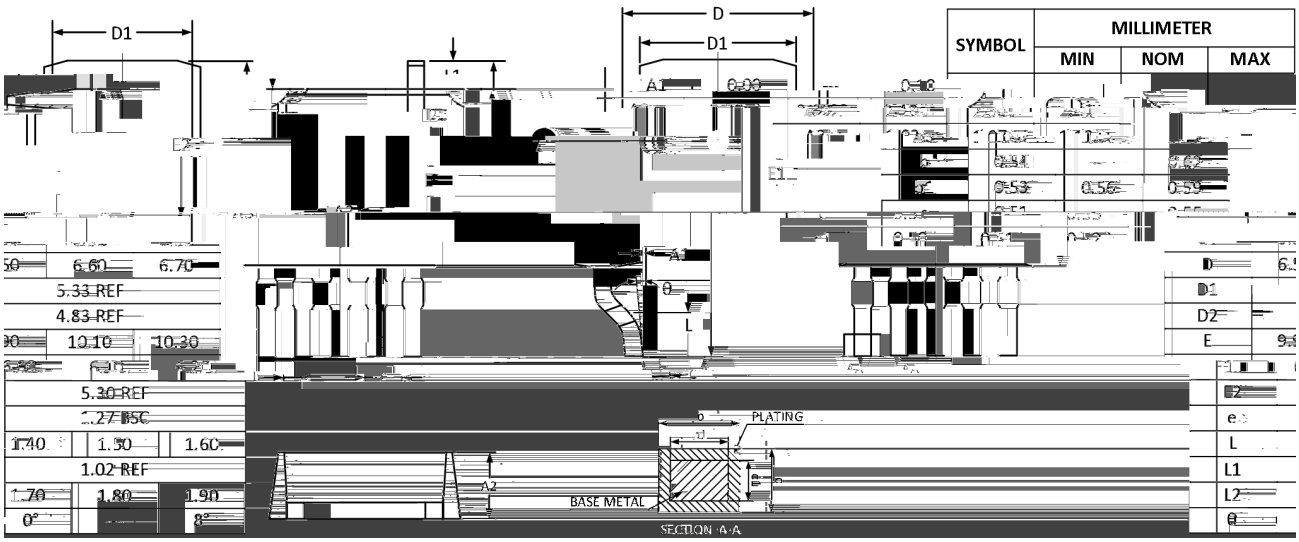
The COS2915x/2930x/2950x/2975x family of regulators are fully protected from damage due to fault conditions. Current limiting is provided. This limiting is linear; output current under overload conditions is constant. Thermal shutdown disables the device when the die temperature exceeds the +125°C maximum safe operating temperature. Line transient protection allows device and load survival even when the input voltage spikes between –0.3V i]

For stability and minimum output noise, a capacitor on the regulator output is necessary. The value of this capacitor is dependent upon the output current; lower currents allow smaller capacitors. The COS2915x/2930x/2950x/2975x regulators are stable with the following minimum capacitor values at full load, as noted in Table 3-1. This capacitor need not be an expensive low ESR type: aluminum electrolytics are adequate. In fact, extremely low ESR capacitors may contribute to instability. Tantalum capacitors are recommended for systems where fast load transient response is important where the regulator is powered from a sour]s1

COS29xx2 and COS29xx3, allow prm !



Dimensions In Millimeters			Dimensions In Inches			Symbol
MIN	NOM	MAX	MIN	NOM	MAX	
0.000	0.60	0.150	0.000	0.002	0.006	A1
D	9.880	10.00	10.180	0.389	0.395	0.401
E	8.200	8.400	8.600	0.323	0.331	0.339
V		5.600 REF			0.220 REF	
X		7.300 REF			0.307 REF	


D1
D
D1
SYMBOL
MILLIMETER
MIN
NOM
MAX
A1
0.00
E1
0.53
0.56
0.59
6.60
6.70
5.33 REF
4.83 REF
10.10
10.30
5.30 REF
1.27 BSC
1.40
1.50
1.60
1.02 REF
1.70
1.80
1.90
0°
8°
D
D1
D2
E
E2
e
L
L1
L2
θ
PLATING
BASE METAL
SECTION A-A