

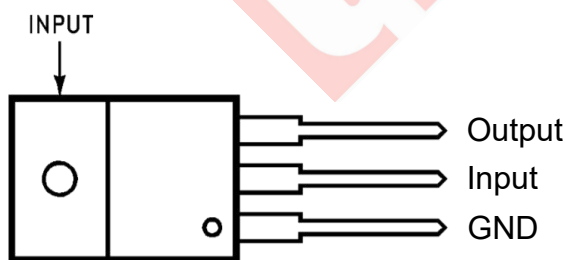
FEATURES

- Output current in excess of 1.0A
- Internal short current circuit limiting
- Internal thermal overload protection
- Output voltage offered of 4% tolerance

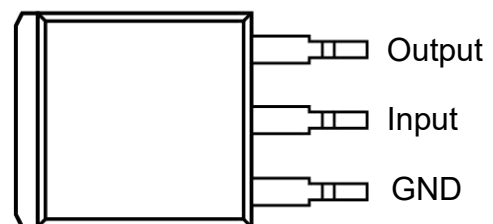
ORDERING INFORMATION

DEVICE	Package Type	MARKING	Packing	Packing Qty
LM7905T	TO220-3L	LM7905	TUBE	1000pcs/box
LM7906T	TO220-3L	LM7906	TUBE	1000pcs/box
LM7908T	TO220-3L	LM7908	TUBE	1000pcs/box
LM7912T	TO220-3L	LM7912	TUBE	1000pcs/box
LM7915T	TO220-3L	LM7915	TUBE	1000pcs/box
LM7918T	TO220-3L	LM7918	TUBE	1000pcs/box
LM7924T	TO220-3L	LM7924	TUBE	1000pcs/box
LM7905S/TR	TO263-3L	LM7905	REEL	500 pcs/reel
LM7906S/TR	TO263-3L	LM7906	REEL	500 pcs/reel
LM7908S/TR	TO263-3L	LM7908	REEL	500 pcs/reel
LM7912S/TR	TO263-3L	LM7912	REEL	500 pcs/reel
LM7915S/TR	TO263-3L	LM7915	REEL	500 pcs/reel
LM7918S/TR	TO263-3L	LM7918	REEL	500 pcs/reel
LM7924S/TR	TO263-3L	LM7924	REEL	500 pcs/reel

PIN CONFIGURATION



TO220-3



TO263-3

ABSOLUTE MAXIMUM RATINGS

Condition	Min	Max
Maximum input voltage at $T_J=25^\circ\text{C}$	-35V	
Maximum operating junction temperature	+125°C	

ELECTRICAL CHARACTERISTICS LM7905

($V_{IN} = -10\text{V}$, $I_o = 500\text{mA}$, $C_{IN}=2.2\mu\text{F}$, $C_o=1.0\mu\text{F}$, $T_J=25^\circ\text{C}$, unless otherwise noted)

CHARACTERISTIC	SYMBOL	TEST CONDITION	NORMS		UNIT
			Min	Max	
Output Voltage	V_o	$-7.0\text{V} \geq V_{IN} \geq -20\text{V}$ $5.0\text{mA} \leq I_o \leq 1.0\text{A}$	-4.82	-5.18	V
Line Regulation	ΔU_v	$I_o = 100\text{mA}$, $-7.0\text{V} \geq V_{IN} \geq -25\text{V}$ $I_o = 100\text{mA}$, $-8.0\text{V} \geq V_{IN} \geq -12\text{V}$ $I_o = 500\text{mA}$, $-7.0\text{V} \geq V_{IN} \geq -25\text{V}$ $I_o = 500\text{mA}$, $-8.0\text{V} \geq V_{IN} \geq -12\text{V}$		47.5 23.5 95 47.5	mV
Load Regulation	ΔU_l	$5.0\text{mA} \leq I_o \leq 1.5\text{A}$ $250\text{mA} \leq I_o \leq 750\text{mA}$		95 47.5	mV
Quiescent Current	I_B			7.8	mA
Quiescent Current Change	ΔI_B	$-7.0\text{V} \geq V_{IN} \geq -25\text{V}$ $5.0\text{mA} \leq I_o \leq 1.5\text{A}$		1.25 0.48	mA

ELECTRICAL CHARACTERISTICS LM7906

($V_{IN} = -11\text{V}$, $I_o = 500\text{mA}$, $C_{IN}=2.2\mu\text{F}$, $C_o=1.0\mu\text{F}$, $T_J=25^\circ\text{C}$, unless otherwise noted)

CHARACTERISTIC	SYMBOL	TEST CONDITION	NORMS		UNIT
			Min	Max	
Output Voltage	V_o	$-8.0\text{V} \geq V_{IN} \geq -21\text{V}$ $5.0\text{mA} \leq I_o \leq 1.0\text{A}$	-5.77	-6.23	V
Line Regulation	ΔU_v	$I_o = 100\text{mA}$, $-8.0\text{V} \geq V_{IN} \geq -25\text{V}$ $I_o = 100\text{mA}$, $-9.0\text{V} \geq V_{IN} \geq -13\text{V}$ $I_o = 500\text{mA}$, $-8.0\text{V} \geq V_{IN} \geq -25\text{V}$ $I_o = 500\text{mA}$, $-9.0\text{V} \geq V_{IN} \geq -13\text{V}$		57 28.5 114 57	mV
Load Regulation	ΔU_l	$5.0\text{mA} \leq I_o \leq 1.5\text{A}$ $250\text{mA} \leq I_o \leq 750\text{mA}$		114 57	mV
Quiescent Current	I_B			7.8	mA
Quiescent Current Change	ΔI_B	$-8.0\text{V} \geq V_{IN} \geq -25\text{V}$ $5.0\text{mA} \leq I_o \leq 1.5\text{A}$		1.25 0.48	mA

ELECTRICAL CHARACTERISTICS LM7908

 ($V_{IN} = -14V$, $I_o = 500mA$, $C_{IN} = 2.2\mu F$, $C_o = 1.0\mu F$, $T_J = 25^\circ C$, unless otherwise noted)

CHARACTERISTIC	SYMBOL	TEST CONDITION	NORMS		UNIT
			Min	Max	
Output Voltage	V_o	$-10.5V \geq V_{IN} \geq -23V$ $5.0mA \leq I_o \leq 1.0 A$	-7.72	-8.28	V
Line Regulation	ΔU_v	$I_o = 100mA$, $-10.5V \geq V_{IN} \geq -25V$ $I_o = 100mA$, $-11V \geq V_{IN} \geq -17V$ $I_o = 500mA$, $-10.5V \geq V_{IN} \geq -25V$ $I_o = 500mA$, $-11V \geq V_{IN} \geq -17V$		76 38 152 76	mV
Load Regulation	ΔU_l	$5.0mA \leq I_o \leq 1.5 A$ $250mA \leq I_o \leq 750mA$		152 76	mV
Quiescent Current	I_B			7.8	mA
Quiescent Current Change	ΔI_B	$-10.5V \geq V_{IN} \geq -25V$ $5.0mA \leq I_o \leq 1.5 A$		0.98 0.48	mA

ELECTRICAL CHARACTERISTICS LM7912

 ($V_{IN} = -19V$, $I_o = 500mA$, $C_{IN} = 2.2\mu F$, $C_o = 1.0\mu F$, $T_J = 25^\circ C$, unless otherwise noted)

CHARACTERISTIC	SYMBOL	TEST CONDITION	NORMS		UNIT
			Min	Max	
Output Voltage	V_o	$-14.5V \geq V_{IN} \geq -21V$ $5.0mA \leq I_o \leq 1.0 A$	-11.52	-12.48	V
Line Regulation	ΔU_v	$I_o = 100mA$, $-14.5V \geq V_{IN} \geq -30V$ $I_o = 100mA$, $-16V \geq V_{IN} \geq -22V$ $I_o = 500mA$, $-14.5V \geq V_{IN} \geq -30V$ $I_o = 500mA$, $-16V \geq V_{IN} \geq -22V$		114 58.5 228 114	mV
Load Regulation	ΔU_l	$5.0mA \leq I_o \leq 1.5 A$ $250mA \leq I_o \leq 750mA$		228 114	mV
Quiescent Current	I_B			7.8	mA
Quiescent Current Change	ΔI_B	$-14.5V \geq V_{IN} \geq -30V$ $5.0mA \leq I_o \leq 1.5 A$		1.25 0.48	mA

ELECTRICAL CHARACTERISTICS LM7915

 ($V_{IN} = -23V$, $I_o = 500mA$, $C_{IN} = 2.2\mu F$, $C_o = 1.0\mu F$, $T_J = 25^\circ C$, unless otherwise noted)

CHARACTERISTIC	SYMBOL	TEST CONDITION	NORMS		UNIT
			Min	Max	
Output Voltage	V_o	$-17.5V \geq V_{IN} \geq -30V$ $5.0mA \leq I_o \leq 1.0 A$	-14.44	-15.56	V
Line Regulation	ΔU_v	$I_o = 100mA$, $-17.5V \geq V_{IN} \geq -30V$ $I_o = 100mA$, $-20V \geq V_{IN} \geq -26V$ $I_o = 500mA$, $-17.5V \geq V_{IN} \geq -30V$ $I_o = 500mA$, $-20V \geq V_{IN} \geq -26V$		142 71 285 142	mV
Load Regulation	ΔU_l	$5.0mA \leq I_o \leq 1.5 A$ $250mA \leq I_o \leq 750mA$		285 142	mV
Quiescent Current	I_B			7.8	mA
Quiescent Current Change	ΔI_B	$-17.5V \geq V_{IN} \geq -30V$ $5.0mA \leq I_o \leq 1.5 A$		0.98 0.48	mA

ELECTRICAL CHARACTERISTICS LM7918

 ($V_{IN} = -27V$, $I_o = 500mA$, $C_{IN} = 2.2\mu F$, $C_o = 1.0\mu F$, $T_J = 25^\circ C$, unless otherwise noted)

CHARACTERISTIC	SYMBOL	TEST CONDITION	NORMS		UNIT
			Min	Max	
Output Voltage	V_o	$-21V \geq V_{IN} \geq -33V$ $5.0mA \leq I_o \leq 1.0 A$	-17.34	-18.66	V
Line Regulation	ΔU_v	$I_o = 100mA$, $-21V \geq V_{IN} \geq -33V$ $I_o = 100mA$, $-24V \geq V_{IN} \geq -30V$ $I_o = 500mA$, $-21V \geq V_{IN} \geq -33V$ $I_o = 500mA$, $-24V \geq V_{IN} \geq -30V$		171 85.5 342 171	mV
Load Regulation	ΔU_l	$5.0mA \leq I_o \leq 1.5 A$ $250mA \leq I_o \leq 750mA$		342 171	mV
Quiescent Current	I_B			7.8	mA
Quiescent Current Change	ΔI_B	$-21V \geq V_{IN} \geq -33V$ $5.0mA \leq I_o \leq 1.5 A$		0.98 0.48	mA

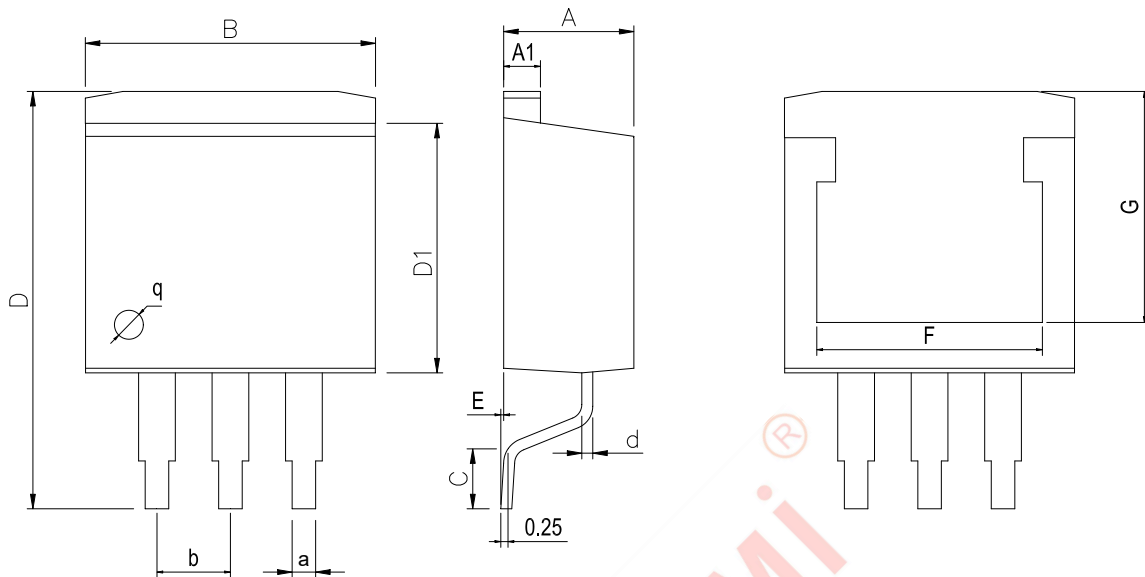
ELECTRICAL CHARACTERISTICS LM7924

 ($V_{IN} = -33V$, $I_o = 500mA$, $C_{IN} = 2.2\mu F$, $C_o = 1.0\mu F$, $T_J = 25^\circ C$, unless otherwise noted)

CHARACTERISTIC	SYMBOL	TEST CONDITION	NORMS		UNIT
			Min	Max	
Output Voltage	V_o	$-27V \geq V_{IN} \geq -38V$ $5.0mA \leq I_o \leq 1.0 A$	-23.05	-24.95	V
Line Regulation	ΔU_v	$I_o = 100mA$, $-27V \geq V_{IN} \geq -38V$ $I_o = 100mA$, $-30V \geq V_{IN} \geq -36V$ $I_o = 500mA$, $-27V \geq V_{IN} \geq -38V$ $I_o = 500mA$, $-30V \geq V_{IN} \geq -36V$		228 114 446 228	mV
Load Regulation	ΔU_l	$5.0mA \leq I_o \leq 1.5 A$ $250mA \leq I_o \leq 750mA$		446 228	mV
Quiescent Current	I_B			7.8	mA
Quiescent Current Change	ΔI_B	$-27V \geq V_{IN} \geq -33V$ $5.0mA \leq I_o \leq 1.5 A$		0.98 0.48	mA

Physical Dimensions

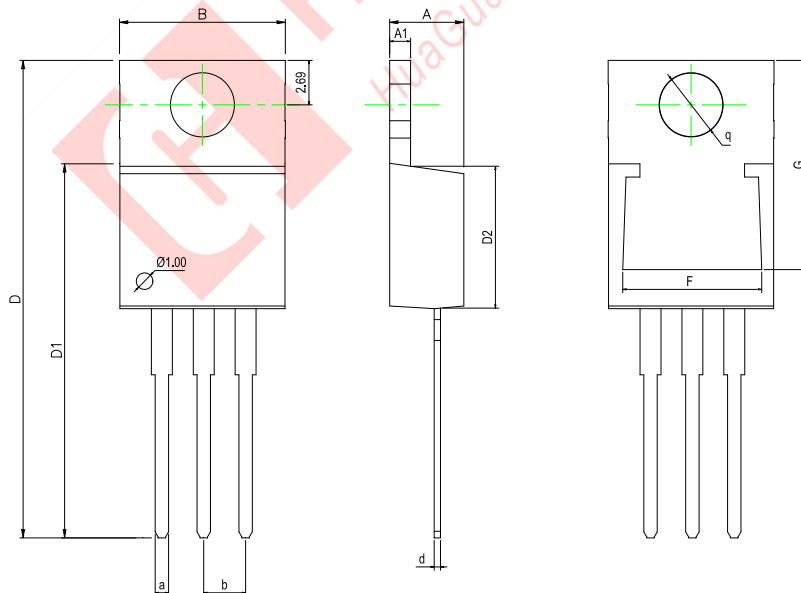
TO263-3



Dimensions In Millimeters(TO263-3)

Symbol:	A	A1	B	C	D	D1	E	F	G	a	b
Min:	4.45	1.22	10	1.89	13.7	8.38	0	8.332	7.70	0.71	2.54BSC
Max:	4.62	1.32	10.4	2.19	14.6	8.89	0.305	8.552	8.10	0.97	

TO220-3



Dimensions In Millimeters(TO220-3)

Symbol:	A	A1	B	D	D1	D2	F	G	a	d	b	q
Min:	4.45	1.22	10	13.7	22.42	8.50	8.30	12.55	0.71	0.33	2.54BS	3.80TYP
Max:	4.62	1.32	10.4	14.6	22.62	9.10	8.55	12.75	0.97	0.42	C	

IMPORTANT STATEMENT:

Huaguan Semiconductor Co.,Ltd. reserves the right to change the products and services provided without notice. Customers should obtain the latest relevant information before ordering, and verify the timeliness and accuracy of this information.

Customers are responsible for complying with safety standards and taking safety measures when using our products for system design and machine manufacturing to avoid potential risks that may result in personal injury or property damage.

Our products are not licensed for applications in life support, military, aerospace, etc., so we do not bear the consequences of the application of these products in these fields.

Huaguan Semiconductor Co.,Ltd. the performance of the semiconductor products produced by the company can reach the performance indicators that can be applied at the time of sales. The use of testing and other quality control technologies is limited to the quality assurance scope of Huaguan semiconductor. Not all parameters of each device need to be tested. The above documents are for reference only, and all are subject to the physical parameters.

Our documentation is only permitted to be copied without any tampering with the content, so we do not accept any responsibility or liability for the altered documents.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Linear Voltage Regulators](#) category:

Click to view products by [HGSEMI](#) manufacturer:

Other Similar products are found below :

[LV56831P-E](#) [LV5684PVD-XH](#) [MCDTSA6-2R](#) [L7815ACV-DG](#) [PQ3DZ53U](#) [LV56801P-E](#) [TLE42794G](#) [L78L05CZ/1SX](#) [L78LR05DL-MA-E](#) [636416C](#) [714954EB](#) [BA033LBSG2-TR](#) [LV5680P-E](#) [L78M15CV-DG](#) [L79M05T-E](#) [TLS202A1MBVHTSA1](#) [L78LR05D-MA-E](#) [NCV317MBTG](#) [NTE7227](#) [LV5680NPVC-XH](#) [LT1054CN8](#) [MP2018GZD-5-Z](#) [MP2018GZD-33-Z](#) [MIC5281-3.3YMM](#) [MC78L06BP-AP](#) [TA48LS05F\(TE85L,F\)](#) [TA78L12F\(TE12L,F\)](#) [TC47BR5003ECT](#) [TCR2LN12,LF\(S](#) [TCR2LN28,LF\(S](#) [TCR2LN30,LF\(S](#) [TCR3DF295,LM\(CT](#) [TCR3DF40,LM\(CT](#) [BA178M20CP-E2](#) [L78M12ABDT](#) [LM7812SX/NOPB](#) [LR645N3-G-P003](#) [LR645N3-G-P013](#) [ZXTR2005P5-13](#) [SCD7812BTG](#) [TCR3DF335,LM\(CT](#) [ZXTR2012K-13](#) [TLE42994E V33](#) [ZXTR2008K-13](#) [ZXTR2005K-13](#) [L88R05DL-E](#) [ADP3300ARTZ-2.7RL7](#) [LM120K-15/883](#) [IFX54441LDVXUMA1](#) [LM317D2T-TR](#)