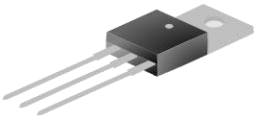
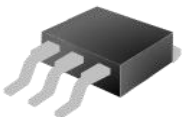
FEATURES

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



TO220-3

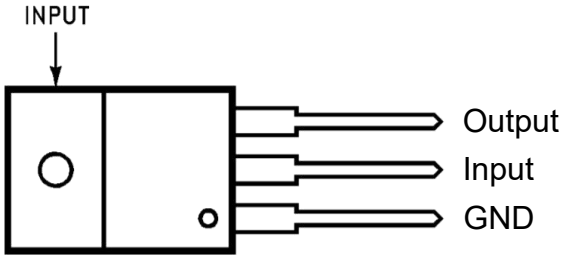


TO263-3

ORDERING INFORMATION

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

PIN CONFIGURATION



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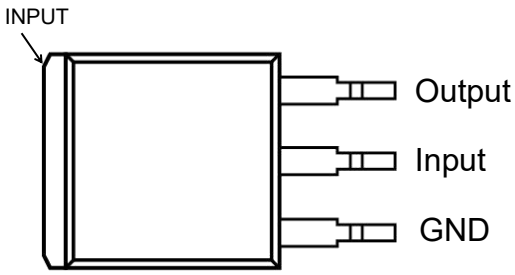


TO-263-3

ABSOLUTE MAXIMUM RATINGS

Condition	VALUE	UNIT
Maximum input voltage at T_J=25°C	-35	V
Maximum operating junction temperature	+125	℃
Lead Temperature (TL) (Soldering, 10 seconds)	+245	℃

ELECTRICAL CHARACTERISTICS LM7905

(V_{IN}= -10V, I_O = 500mA, C_{IN}=2.2μF, C_O=1.0μF, T_J=25°C, unless otherwise noted)

CHARACTERISTIC	SYMBOL	TEST CONDITION	NORMS		UNIT
			Min	Max	
Output Voltage	V_O	-7.0V ≥ V_{IN} ≥ -20V 5.0mA ≤ I_O ≤ 1.0 A	-4.82	-5.18	V
Line Regulation	ΔU_V	I_O = 100mA, -7.0V ≥ V_{IN} ≥ -25V I_O = 100mA, -8.0V ≥ V_{IN} ≥ -12V I_O = 500mA, -7.0V ≥ V_{IN} ≥ -25V I_O = 500mA, -8.0V ≥ V_{IN} ≥ -12V		47.5 23.5 95 47.5	mV
Load Regulation	ΔU_I	5.0mA≤ I_O ≤ 1.5 A 250mA≤ I_O ≤ 750mA		95 47.5	mV
Quiescent Current	I_B			7.8	mA
Quiescent Current Change	ΔI_B	-7.0V ≥ V_{IN} ≥ -25V 5.0mA ≤ I_O ≤ 1.5 A		1.25 0.48	mA

ELECTRICAL CHARACTERISTICS LM7906

(V_{IN}= -11V, I_O = 500mA, C_{IN}=2.2μF, C_O=1.0μF, T_J=25°C, unless otherwise noted)

CHARACTERISTIC	SYMBOL	TEST CONDITION	NORMS		UNIT
			Min	Max	
Output Voltage	V_O	-8.0V ≥ V_{IN} ≥ -21V5.0mA≤ I_O ≤1.0 A	-5.77	-6.23	V
Line Regulation	ΔU_V	I_O = 100mA, -8.0V ≥ V_{IN} ≥ -25V I_O = 100mA, -9.0V ≥ V_{IN} ≥ -13V I_O = 500mA,-8.0V ≥ V_{IN} ≥ -25V I_O = 500mA, -9.0V ≥ V_{IN} ≥ -13V		57 28.5 114 57	mV
Load Regulation	ΔU_I	5.0mA≤ I_O ≤ 1.5 A 250mA≤ I_O ≤ 750mA		114 57	mV
Quiescent Current	I_B			7.8	mA
Quiescent Current Change	ΔI_B	-8.0V ≥ V_{IN} ≥ -25V 5.0mA≤ I_O ≤ 1.5 A		1.25 0.48	mA

ELECTRICAL CHARACTERISTICS LM7908

(V_{IN}= -14V, I_O = 500mA, C_{IN}=2.2μF, C_O=1.0μF, T_J=25°C, unless otherwise noted)

CHARACTERISTIC	SYMBOL	TEST CONDITION	NORMS		UNIT
			Min	Max	
Output Voltage	V_O	-10.5V ≥ V_{IN} ≥ -23V 5.0mA≤ I_O ≤ 1.0 A	-7.72	-8.28	V
Line Regulation	ΔU_V	I_O = 100mA, -10.5V ≥ V_{IN} ≥ -25V I_O = 100mA, -11V ≥ V_{IN} ≥ -17V I_O = 500mA, -10.5V≥ V_{IN} ≥ -25V I_O = 500mA, -11V≥ V_{IN} ≥ -17V		76 38 152 76	mV
Load Regulation	ΔU_I	5.0mA≤ I_O ≤ 1.5 A 250mA≤ I_O ≤ 750mA		152 76	mV
Quiescent Current	I_B			7.8	mA
Quiescent Current Change	ΔI_B	-10.5V ≥ V_{IN} ≥ -25V 5.0mA≤ I_O ≤ 1.5 A		0.98 0.48	mA

ELECTRICAL CHARACTERISTICS LM7912

(V_{IN}= -19V, I_O = 500mA, C_{IN}=2.2μF, C_O=1.0μF, T_J=25°C, unless otherwise noted)

CHARACTERISTIC	SYMBOL	TEST CONDITION	NORMS		UNIT
			Min	Max	
Output Voltage	V_O	-14.5V ≥ V_{IN} ≥-21V 5.0mA ≤ I_O ≤ 1.0 A	-11.52	-12.48	V
Line Regulation	ΔU_V	I_O = 100mA, -14.5V ≥ V_{IN} ≥ -30V I_O = 100mA, -16V ≥ V_{IN} ≥ -22V I_O = 500mA, -14.5V ≥ V_{IN} ≥ -30V I_O = 500mA, -16V ≥ V_{IN} ≥ -22V		114 58.5 228 114	mV
Load Regulation	ΔU_I	5.0mA ≤ I_O ≤ 1.5 A 250mA ≤ I_O ≤ 750mA		228 114	mV
Quiescent Current	I_B			7.8	mA
Quiescent Current Change	ΔI_B	-14.5V ≥ V_{IN} ≥ -30V 5.0mA ≤ I_O ≤ 1.5 A		1.25 0.48	mA

ELECTRICAL CHARACTERISTICS LM7915

(V_{IN}= -23V, I_O = 500mA, C_{IN}=2.2μF, C_O=1.0μF, T_J=25°C, unless otherwise noted)

CHARACTERISTIC	SYMBOL	TEST CONDITION	NORMS		UNIT
			Min	Max	
Output Voltage	V_O	-17.5V ≥ V_{IN} ≥ -30V 5.0mA ≥ I_O ≥ 1.0 A	-14.44	-15.56	V
Line Regulation	ΔU_V	I_O = 100mA, -17.5V ≥ V_{IN} ≥ -30V I_O = 100mA, -20V ≥ V_{IN} ≥ -26V I_O = 500mA, -17.5V ≥ V_{IN} ≥ -30V I_O = 500mA, -20V ≥ V_{IN} ≥ -26V		142 71 285 142	mV
Load Regulation	ΔU_I	5.0mA ≤ I_O ≤ 1.5 A 250mA ≤ I_O ≤ 750mA		285 142	mV
Quiescent Current	I_B			7.8	mA
Quiescent Current Change	ΔI_B	-17.5V ≥ V_{IN} ≥ -30V 5.0mA≤ I_O ≤ 1.5 A		0.98 0.48	mA

ELECTRICAL CHARACTERISTICS LM7918

(V_{IN}= -27V, I_O = 500mA, C_{IN}=2.2μF, C_O=1.0μF, T_J=25°C, unless otherwise noted)

CHARACTERISTIC	SYMBOL	TEST CONDITION	NORMS		UNIT
			Min	Max	
Output Voltage	V_O	-21V ≥ V_{IN} ≥ -33V 5.0mA ≤ I_O ≤ 1.0 A	-17.34	-18.66	V
Line Regulation	ΔU_V	I_O = 100mA, -21V ≥ V_{IN} ≥ -33V I_O = 100mA, -24V ≥ V_{IN} ≥ -30V I_O = 500mA, -21V ≥ V_{IN} ≥ -33V I_O = 500mA, -24V ≥ V_{IN} ≥ -30V		171 85.5 342 171	mV
Load Regulation	ΔU_I	5.0mA≤ I_O ≤ 1.5 A 250mA≤I_O ≤ 750mA		342 171	mV
Quiescent Current	I_B			7.8	mA
Quiescent Current Change	ΔI_B	-21V ≥ V_{IN} ≥ -33V 5.0mA ≤ I_O ≤ 1.5 A		0.98 0.48	mA

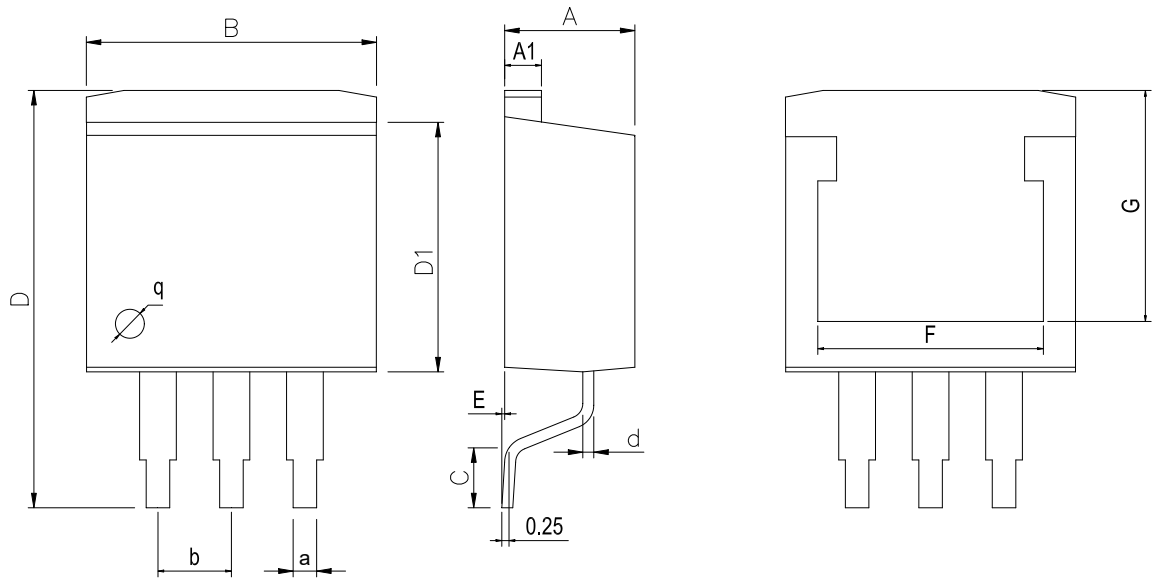
ELECTRICAL CHARACTERISTICS LM7924

(V_{IN}= -33V, I_O = 500mA, C_{IN}=2.2μF, C_O=1.0μF, T_J=25°C, unless otherwise noted)

CHARACTERISTIC	SYMBOL	TEST CONDITION	NORMS		UNIT
			Min	Max	
Output Voltage	V_O	-27V ≥ V_{IN} ≥ -38V 5.0mA ≤ I_O ≤ 1.0 A	-23.05	-24.95	V
Line Regulation	ΔU_V	I_O = 100mA, -27V ≥ V_{IN} ≥ -38V I_O = 100mA, -30V ≥ V_{IN} ≥ -36V I_O = 500mA, -27V ≥ V_{IN} ≥ -38V I_O = 500mA, -30V ≥ V_{IN} ≥ -36V		228 114 446 228	mV
Load Regulation	ΔU_I	5.0mA ≤ I_O ≤ 1.5 A 250mA ≤ I_O ≤ 750mA		446 228	mV
Quiescent Current	I_B			7.8	mA
Quiescent Current Change	ΔI_B	-27V ≥ V_{IN} ≥ -33V 5.0mA ≤ I_O ≤ 1.5 A		0.98 0.48	mA

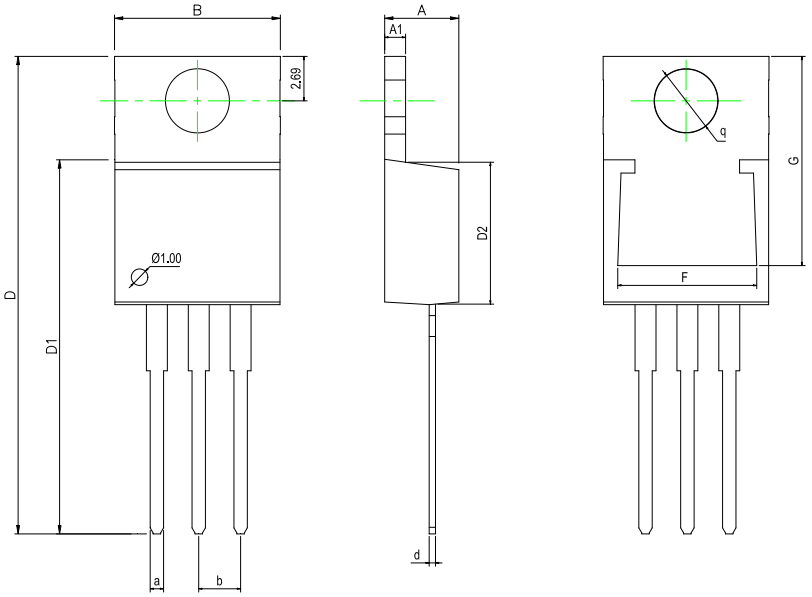
PHYSICAL DIMENSIONS

TO-263-3



Dimensions In Millimeters(TO-263-3)											
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	

TO-220-3



Dimensions In Millimeters(TO-220-3)												
Symbol:	A	A1	B	D	D1	D2	F	G	a	d	b	q
Min:	4.45	1.22	10	28.2	22.22	8.50	8.30	12.55	0.71	0.33	2.54BS	3.80TYP
Max:	4.62	1.32	10.4	28.9	22.62	9.10	8.55	12.75	0.97	0.42	C	

REVISION HISTORY

DATE	REVISION	PAGE
2018-1-5	New	1-9
2023-7-24	Update Lead Temperature	2

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