

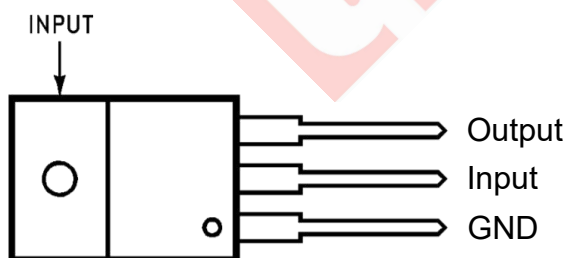
FEATURES

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

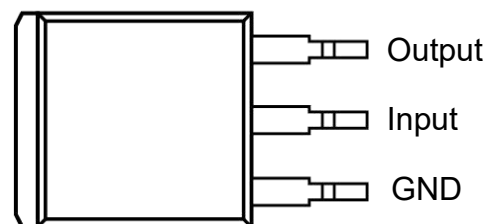
ORDERING INFORMATION

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_I	$5.0\text{mA} \leq I_O \leq 1.5\text{A}$ $250\text{mA} \leq I_O \leq 750\text{mA}$		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_I	$5.0\text{mA} \leq I_O \leq 1.5\text{A}$ $250\text{mA} \leq I_O \leq 750\text{mA}$		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

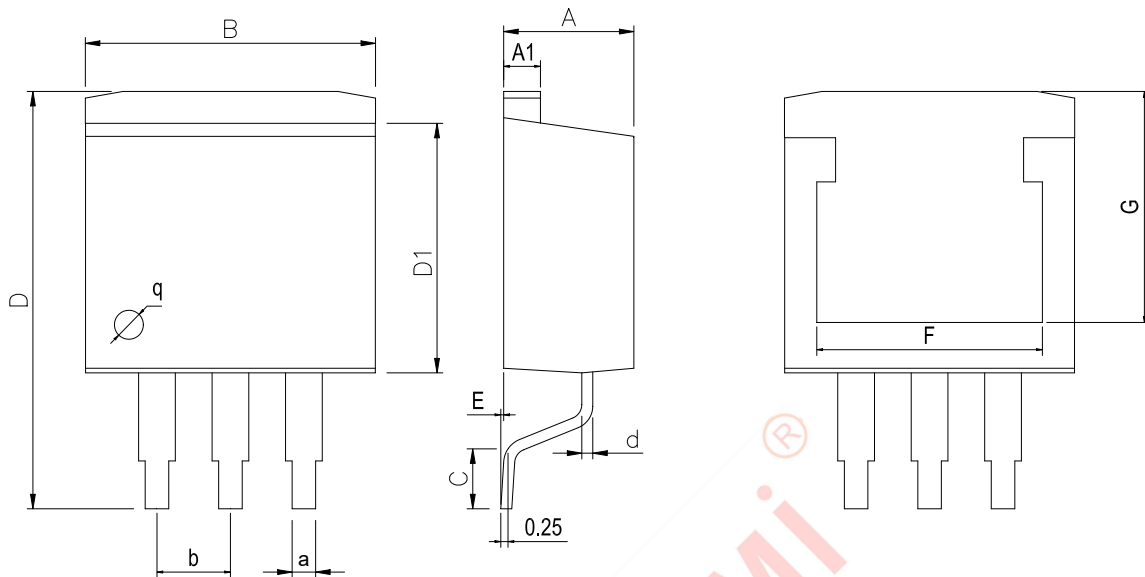
 ($V_{IN} = -27V$, $I_o = 500mA$, $C_{IN} = 2.2\mu F$, $C_o = 1.0\mu F$, $T_J = 25^\circ C$, unless otherwise noted)

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

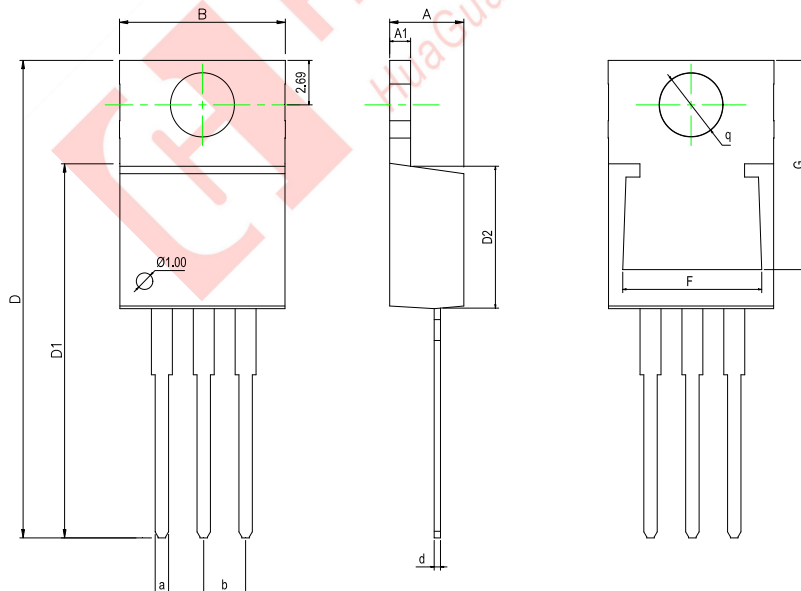
ELECTRICAL CHARACTERISTICS LM7924

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

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