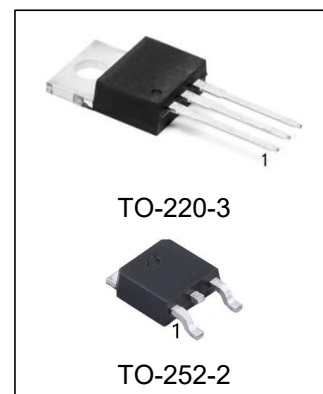


FEATURES

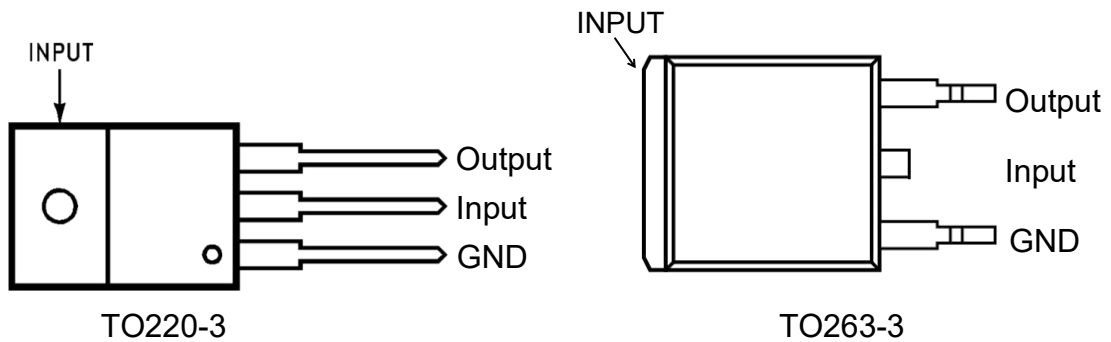
- Output current in excess of 0.5A
- Internal short current circuit limiting
- Internal thermal overload protection
- Output voltage offered of 4% tolerance



ORDERING INFORMATION

DEVICE	Package Type	MARKING	Packing	Packing Qty
LM79M05T	TO-220-3	LM79M05	TUBE	1000pcs/box
LM79M06T	TO-220-3	LM79M06	TUBE	1000pcs/box
LM79M08T	TO-220-3	LM79M08	TUBE	1000pcs/box
LM79M12T	TO-220-3	LM79M12	TUBE	1000pcs/box
LM79M15T	TO-220-3	LM79M15	TUBE	1000pcs/box
LM79M18T	TO-220-3	LM79M18	TUBE	1000pcs/box
LM79M24T	TO-220-3	LM79M24	TUBE	1000pcs/box
LM79M05CDT/TR	TO-252-2	79M05	REEL	2500 pcs/reel
LM79M06CDT/TR	TO-252-2	79M06	REEL	2500 pcs/reel
LM79M08CDT/TR	TO-252-2	79M08	REEL	2500 pcs/reel
LM79M12CDT/TR	TO-252-2	79M12	REEL	2500 pcs/reel
LM79M15CDT/TR	TO-252-2	79M15	REEL	2500 pcs/reel
LM79M18CDT/TR	TO-252-2	79M18	REEL	2500 pcs/reel
LM79M24CDT/TR	TO-252-2	79M24	REEL	2500 pcs/reel

PIN CONFIGURATION



ABSOLUTE MAXIMUM RATINGS

Condition	VALUE	UNIT
Maximum input voltage at ($T_J=25^{\circ}\text{C}$)	-35	V
Maximum operating junction temperature	+125	$^{\circ}\text{C}$
Lead Temperature (TL) (Soldering, 10 seconds)	TO-220	+245
	TO-252	+260
Power Dissipation ($T_J=25^{\circ}\text{C}$)	Internally Limited	W
Thermal Resistance, Junction-to-Ambient θ_{JA}	TO220-3	65
	TO252-2	92
Thermal Resistance, Junction-to-Case θ_{JC}	TO220-3	5.0
	TO252-2	6.0

Note: Absolute Maximum Ratings indicate limits beyond which damage to the device may occur. Operating Ratings indicate conditions for which the device is intended to be functional, but specific performance is not ensured.

ELECTRICAL CHARACTERISTICS LM79M05

($V_{IN} = -10\text{V}$, $I_O = 350\text{mA}$, $C_{IN} = 2.2\mu\text{F}$, $C_O = 1.0\mu\text{F}$, $T_J = 25^{\circ}\text{C}$, unless otherwise noted)

CHARACTERISTIC	SYMBOL	TEST CONDITION	NORMS		UNIT
			Min	Max	
Output Voltage	V_O	$-7.0\text{V} \geq V_{IN} \geq -20\text{V}$ $5.0\text{mA} \leq I_O \leq 0.5\text{A}$	-4.82	-5.18	V
Line Regulation	ΔU_V	$I_O = 100\text{mA}$, $-7.0\text{V} \geq V_{IN} \geq -25\text{V}$ $I_O = 100\text{mA}$, $-8.0\text{V} \geq V_{IN} \geq -12\text{V}$ $I_O = 350\text{mA}$, $-7.0\text{V} \geq V_{IN} \geq -25\text{V}$ $I_O = 350\text{mA}$, $-8.0\text{V} \geq V_{IN} \geq -12\text{V}$		47.5 23.5 95 47.5	mV
Load Regulation	ΔU_I	$5.0\text{mA} \leq I_O \leq 0.5\text{A}$ $150\text{mA} \leq I_O \leq 350\text{mA}$		95 47.5	mV
Quiescent Current	I_B			7.8	mA
Quiescent Current Change	ΔI_B	$-7.0\text{V} \geq V_{IN} \geq -25\text{V}$ $5.0\text{mA} \leq I_O \leq 0.5\text{A}$		1.25 0.48	mA

ELECTRICAL CHARACTERISTICS LM79M06

($V_{IN} = -11V$, $I_O = 350mA$, $C_{IN} = 2.2\mu F$, $C_O = 1.0\mu F$, $T_J = 25^\circ C$, unless otherwise noted)

CHARACTERISTIC	SYMBOL	TEST CONDITION	NORMS		UNIT
			Min	Max	
Output Voltage	V_O	$-8.0V \geq V_{IN} \geq -21V$ $5.0mA \leq I_O \leq 0.5A$	-5.77	-6.23	V
Line Regulation	ΔU_V	$I_O = 100mA$, $-8.0V \geq V_{IN} \geq -25V$ $I_O = 100mA$, $-9.0V \geq V_{IN} \geq -13V$ $I_O = 350mA$, $-8.0V \geq V_{IN} \geq -25V$ $I_O = 350mA$, $-9.0V \geq V_{IN} \geq -13V$		57 28.5 114 57	mV
Load Regulation	ΔU_I	$5.0mA \leq I_O \leq 0.5A$ $150mA \leq I_O \leq 350mA$		114 57	mV
Quiescent Current	I_B			7.8	mA
Quiescent Current Change	ΔI_B	$-8.0V \geq V_{IN} \geq -25V$ $5.0mA \leq I_O \leq 0.5A$		1.25 0.48	mA

ELECTRICAL CHARACTERISTICS LM79M08

(V_{IN} = -14V, I_O = 350mA, 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 ≤ 0.5 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 = 350mA, -10.5V ≥ V _{IN} ≥ -25V I _O = 350mA, -11V ≥ V _{IN} ≥ -17V		76 38 152 76	mV
Load Regulation	ΔU _I	5.0mA ≤ I _O ≤ 0.5 A 150mA ≤ I _O ≤ 350mA		152 76	mV
Quiescent Current	I _B			7.8	mA
Quiescent Current Change	ΔI _B	-10.5V ≥ V _{IN} ≥ -25V 5.0mA ≤ I _O ≤ 0.5 A		0.98 0.48	mA

ELECTRICAL CHARACTERISTICS LM79M12

(V_{IN} = -19V, I_O = 350mA, 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 ≤ 0.5 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 = 350mA, -14.5V ≥ V _{IN} ≥ -30V I _O = 350mA, -16V ≥ V _{IN} ≥ -22V		114 58.5 228 114	mV
Load Regulation	ΔU _I	5.0mA ≤ I _O ≤ 1.5 A 150mA ≤ I _O ≤ 350mA		228 114	mV
Quiescent Current	I _B			7.8	mA
Quiescent Current Change	ΔI _B	-14.5V ≥ V _{IN} ≥ -30V 5.0mA ≤ I _O ≤ 0.5 A		1.25 0.48	mA

ELECTRICAL CHARACTERISTICS LM79M15

($V_{IN} = -23V$, $I_O = 350mA$, $C_{IN} = 2.2\mu F$, $C_O = 1.0\mu F$, $T_J = 25^\circ C$, unless otherwise noted)

CHARACTERISTIC	SYMBOL	TEST CONDITION	NORMS		UNIT
			Min	Max	
Output Voltage	V_O	$-17.5V \geq V_{IN} \geq -30V$ $5.0mA \leq I_O \leq 0.5 A$	-14.44	-15.56	V
Line Regulation	ΔU_V	$I_O = 100mA$, $-17.5V \geq V_{IN} \geq -30V$ $I_O = 100mA$, $-20V \geq V_{IN} \geq -26V$ $I_O = 350mA$, $-17.5V \geq V_{IN} \geq -30V$ $I_O = 350mA$, $-20V \geq V_{IN} \geq -26V$		142 71 285 142	mV
Load Regulation	ΔU_I	$5.0mA \leq I_O \leq 0.5 A$ $150mA \leq I_O \leq 350mA$		285 142	mV
Quiescent Current	I_B			7.8	mA
Quiescent Current Change	ΔI_B	$-17.5V \geq V_{IN} \geq -30V$ $5.0mA \leq I_O \leq 0.5 A$		0.98 0.48	mA

ELECTRICAL CHARACTERISTICS LM79M18

($V_{IN} = -27V$, $I_O = 350mA$, $C_{IN} = 2.2\mu F$, $C_O = 1.0\mu F$, $T_J = 25^\circ C$, unless otherwise noted)

CHARACTERISTIC	SYMBOL	TEST CONDITION	NORMS		UNIT
			Min	Max	
Output Voltage	V_O	$-21V \geq V_{IN} \geq -33V$ $5.0mA \leq I_O \leq 0.5 A$	-17.34	-18.66	V
Line Regulation	ΔU_V	$I_O = 100mA$, $-21V \geq V_{IN} \geq -33V$ $I_O = 100mA$, $-24V \geq V_{IN} \geq -30V$ $I_O = 350mA$, $-21V \geq V_{IN} \geq -33V$ $I_O = 350mA$, $-24V \geq V_{IN} \geq -30V$		171 85.5 342 171	mV
Load Regulation	ΔU_I	$5.0mA \leq I_O \leq 0.5 A$ $150mA \leq I_O \leq 350mA$		342 171	mV
Quiescent Current	I_B			7.8	mA
Quiescent Current Change	ΔI_B	$-21V \geq V_{IN} \geq -33V$ $5.0mA \leq I_O \leq 0.5 A$		0.98 0.48	mA

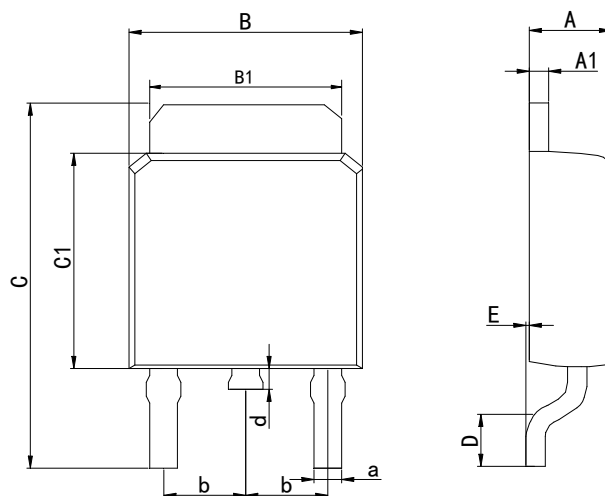
ELECTRICAL CHARACTERISTICS LM79M24

($V_{IN} = -33V$, $I_O = 350mA$, $C_{IN} = 2.2\mu F$, $C_O = 1.0\mu F$, $T_J = 25^\circ C$, unless otherwise noted)

CHARACTERISTIC	SYMBOL	TEST CONDITION	NORMS		UNIT
			Min	Max	
Output Voltage	V_O	$-27V \geq V_{IN} \geq -38V$ $5.0mA \leq I_O \leq 0.5 A$	-23.05	-24.95	V
Line Regulation	ΔU_V	$I_O = 100mA$, $-27V \geq V_{IN} \geq -38V$ $I_O = 100mA$, $-30V \geq V_{IN} \geq -36V$ $I_O = 350mA$, $-27V \geq V_{IN} \geq -38V$ $I_O = 350mA$, $-30V \geq V_{IN} \geq -36V$		228 114 446 228	mV
Load Regulation	ΔU_I	$5.0mA \leq I_O \leq 0.5 A$ $150mA \leq I_O \leq 350mA$		446 228	mV
Quiescent Current	I_B			7.8	mA
Quiescent Current Change	ΔI_B	$-27V \geq V_{IN} \geq -33V$ $5.0mA \leq I_O \leq 0.5 A$		0.98 0.48	mA

PHYSICAL DIMENSIONS

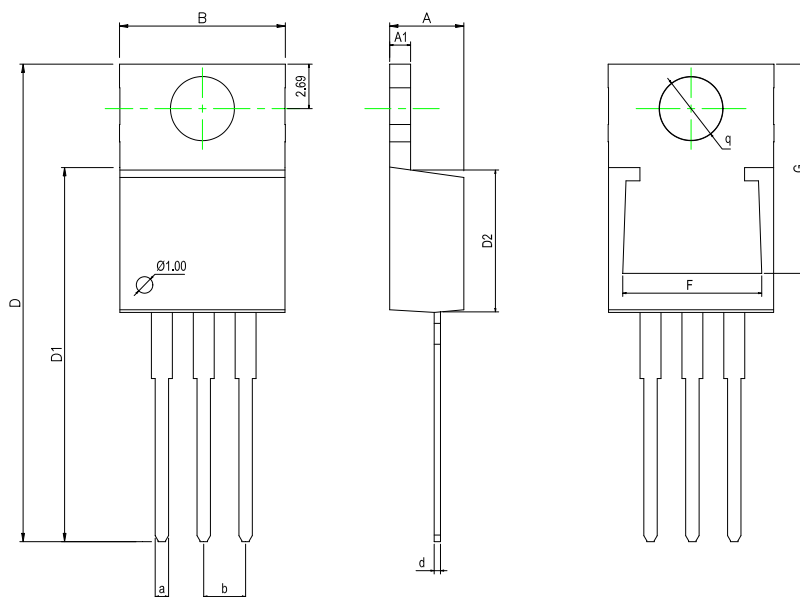
TO-252-2



Dimensions In Millimeters(TO-252-2)

Symbol:	A	A1	B	B1	C	C1	D	E	a	d	b
Min:	2.10	0.45	6.40	5.10	9.20	5.30	0.90	0	0.50	0.60	2.28
Max:	2.50	0.70	6.80	5.50	10.6	6.30	1.75	0.23	0.80	1.20	BSC

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	2.54	3.80
Max:	4.62	1.32	10.4	28.9	22.62	9.10	8.55	12.75	0.97	0.42	BSC	TYP

REVISION HISTORY

DATE	REVISION	PAGE
2018-1-5	New	1-9
2023-9-13	Update Package Type、Add annotation for Maximum Ratings.	1、 2
2024-11-5	Update Lead Temperature	2

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