

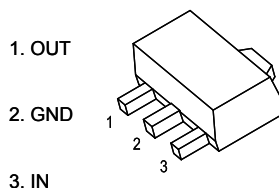
FEATURE

Maximum Output current I_{OM} : 0.1 A

Output voltage V_o : -12 V

Continuous total dissipation P_D : 0.5 W

SOT-89-3L



79L12

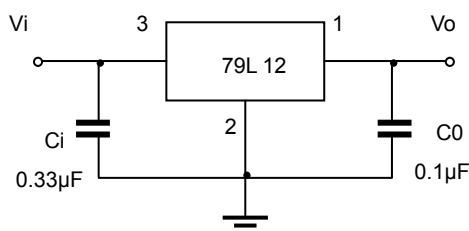
ABSOLUTE MAXIMUM RATINGS (Operating temperature range applies unless otherwise specified)

Parameter	Symbol	Rating	Unit
Input Voltage	V_I	-35	V
Operating Junction Temperature Range	T_{OPR}	-55 to +125	°C
Storage Temperature Range	T_{STG}	-55 to +150	°C

ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JUNCTION TEMPERATURE

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Output voltage	V_o	$T_j=25^{\circ}\text{C}$	-11.5	-12	-12.5	V
		$-14.5\text{V} \leq V_I \leq -27\text{V}, I_o=1\text{mA}-40\text{mA}$	-11.4	-12	-12.6	V
		$I_o=1\text{mA}-70\text{mA}$	-11.4	-12	-12.6	V
Load Regulation	ΔV_o	$T_j=25^{\circ}\text{C}, I_o=1\text{mA to } 100\text{mA}$		24	100	mV
		$T_j=25^{\circ}\text{C}, I_o=1\text{mA to } 40\text{mA}$		15	50	mV
Line regulation	ΔV_o	$-14.5\text{V} \leq V_I \leq -27\text{V}, T_j=25^{\circ}\text{C}$		50	250	mV
		$-16\text{V} \leq V_I \leq -27\text{V}, T_j=25^{\circ}\text{C}$		40	200	mV
Quiescent Current	I_q	25°C			6.5	mA
Quiescent Current Change	ΔI_q	$0^{\circ}\text{C} < T_j < 125^{\circ}\text{C}, -16\text{V} \leq V_I \leq -27\text{V}$			1.5	mA
	ΔI_q	$0^{\circ}\text{C} < T_j < 125^{\circ}\text{C}, 1\text{mA} \leq I_o \leq 40\text{mA}$			0.1	mA
Output Noise Voltage	V_N	$10\text{Hz} \leq f \leq 100\text{KHz}, T_j=25^{\circ}\text{C}$		80		uV
Ripple Rejection	RR	$-15\text{V} \leq V_I \leq -25\text{V}, f=120\text{Hz}$	37	42		dB
Dropout Voltage	V_d	$T_j=25^{\circ}\text{C}$		1.7		V

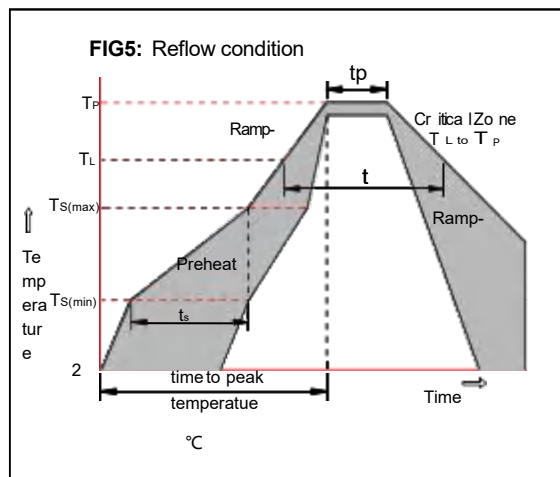
TYPICAL APPLICATION



Note: Bypass capacitors are recommended for optimum stability and transient response and should be located as close as possible to the regulators.

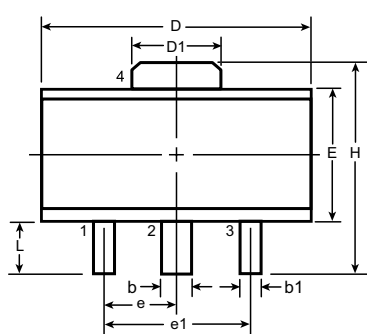
Soldering parameters

Reflow Condition		Pb-Free assembly (see as below)
Pre Heat	-Temperature Min ($T_{s(min)}$)	+150 °C
	-Temperature Max ($T_{s(max)}$)	+200 °C
	-Time (Min to Max) (ts)	60-180 secs.
Average ramp up rate (Liquid us Temp (T_L) to peak)		3 °C/sec. Max
$T_{s(max)}$ to T_L - Ramp-up Rate		3 °C/sec. Max
Reflow	-Temperature (T_L) (Liquid us)	+217 °C
	-Temperature (t_L)	60-150 secs.
Peak Temp (T_P)		+260(+0/-5) °C
Time within 5 °C of actual Peak Temp (t_P)		30 secs. Max
Ramp-down Rate		6 °C/sec. Max
Time 25 °C to Peak Temp (T_P)		8 min. Max
Do not exceed		+260 °C

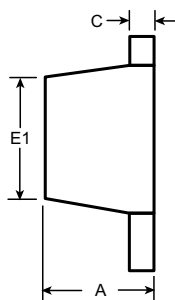


Package Dimensions & Suggested Pad Layout

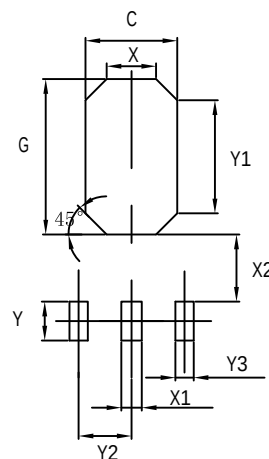
SOT89



Top View



Side View

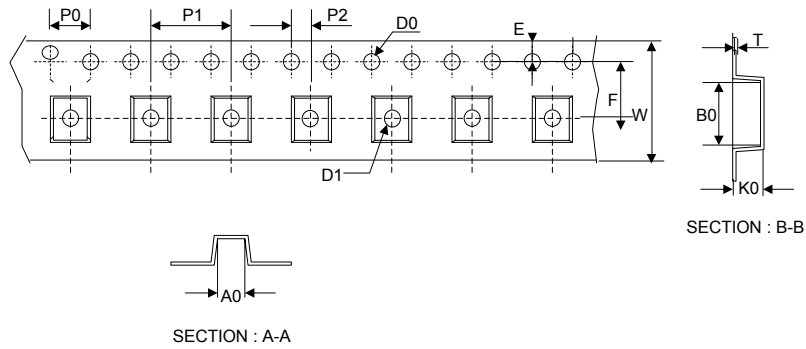


Symbol		A	b	b1	C	D	D1	E	E1	e	e1	H	L
Dimensions (mm)	MIN	1.40	0.44	0.36	0.3	4.40	1.50	2.29	2.00†	1.50 BSC	3.00 BSC	3.94	0.89
	NOM	-	-	-	-	-	-	-	-			-	-
	MAX	1.60	0.56	0.48	0.5	4.60	1.75	2.60	2.29			4.25	1.20

Dimensions	Value (in mm)
C	2.50
G	3.60
X	1.40
X1	0.90
X2	0.90
Y	1.40
Y1	2.60
Y2	1.50
Y3	0.90

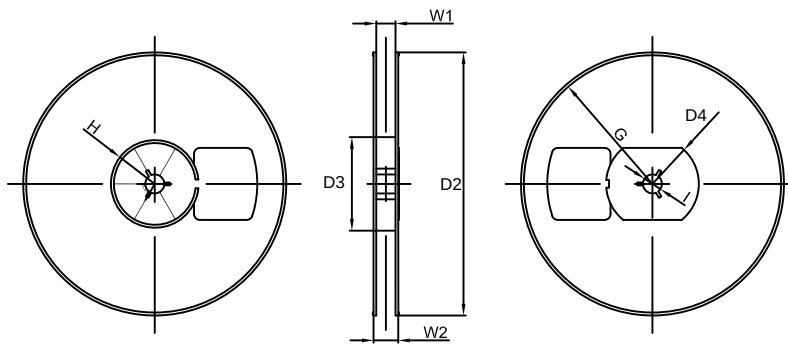
Tape & reel specification

Tape



Symbol	Dimension (mm)
P0	4.00±0.20
P1	8.00±0.20
P2	2.00±0.20
D0	1.60±0.20
D1	1.60±0.20
E	1.75±0.20
F	7.50±0.15
W	16.00±0.20
A0	6.30±0.20
B0	8.25±0.20
K0	2.60±0.20
T	0.23±0.10

13" Reel



D2	180.0±5.0
D3	60Min.
D4	R32.0±2.0
G	R86.5±2.0
H	R30.0±2.0
I	13.0±2.0
W1	13.20±2.0
W2	16.50±2.0

Quantity: 1000PCS