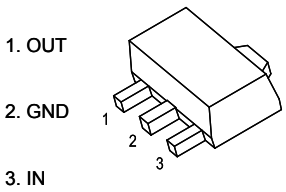
FEATURE

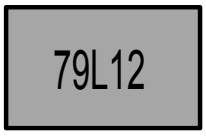
Maximum Output current I_{OM} : 0.1 A

Output voltage V_O: -12 V

Continuous total dissipation P_D : 0. 5 W

SOT-89-3L





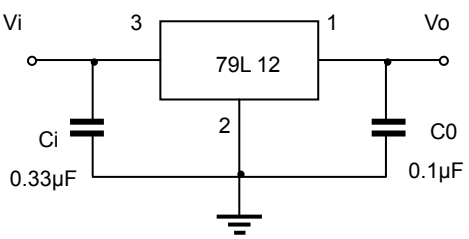
ABSOLUTE MAXIMUM RATINGS (Operating temperature range applies unless otherwise specified)

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

ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JINCTION TEMPERATURE

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Output voltage	V_O	T_j=25℃	-11.5	-12	-12.5	V
		-14.5V≤V_I≤-27V, I_O=1mA-40mA	-11.4	-12	-12.6	V
		I_O=1mA-70mA	-11.4	-12	-12.6	V
Load Regulation	$\triangle V_O$	T_j=25℃ , I_O=1mA to 100mA		24	100	mV
		T_j=25 ℃ , I_O=1mA to 40mA		15	50	mV
Line regulation	$\triangle V_O$	-14.5 V≤V_I≤-27V, T_j=25℃		50	250	mV
		-16V≤V_I≤-27V, T_j=25 ℃		40	200	mV
Quiescent Current	I_q	25℃			6.5	mA
Quiescent Current Change	$\triangle I_q$	0℃<Tj<125℃, -16V≤V_I≤-27V			1.5	mA
	$\triangle I_q$	0℃<Tj<125℃,1mA≤I_O≤40mA			0.1	mA
Output Noise Voltage	V_N	10Hz≤f≤100KHz,Tj=25℃		80		uV
Ripple Rejection	R_R	-15V≤V_I≤-25V,f=120Hz	37	42		dB
Dropout Voltage	V_d	T_j=25℃		1.7		V

TYPICAL APPLICATION

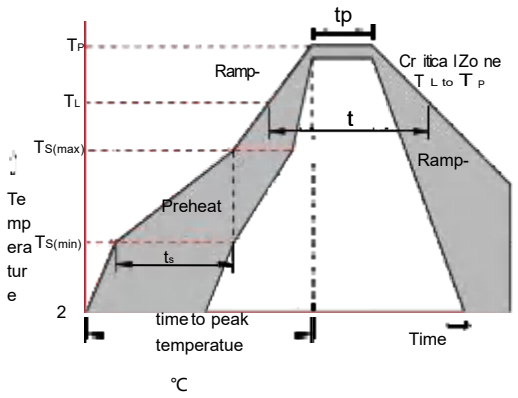


Note: Bypass capacitors are recommended for optimum stability and transient response and should be located as close as Possible to the regulators.

Soldering parameters

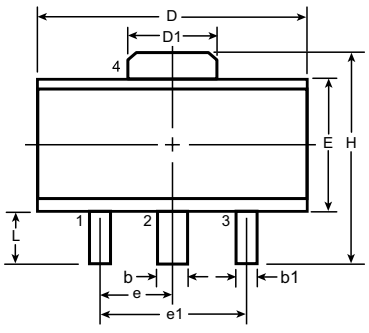
Reflow Condition		Pb-Free assembly (see as bellow)
Pre Heat	-Temperature Min ($T_{s(min)}$)	+150℃
	-Temperature Max($T_{s(max)}$)	+200℃
	-Time (Min to Max) (ts)	60-180 secs.
Average ramp up rate (Liquid us Temp (T_L) to peak)		3℃/sec. Max
$T_{s(max)}$ to T_L - Ramp-up Rate		3℃/sec. Max
Reflow	-Temperature(T_L)(Liquid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

FIG5: Reflow condition

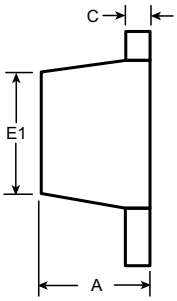


Package Dimensions & Suggested Pad Layout

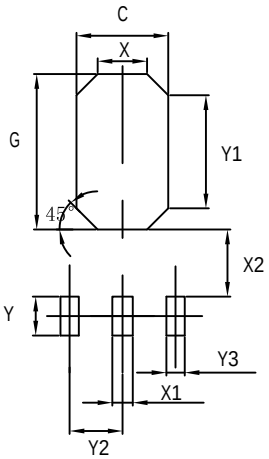
SOT89



Top View



Side View

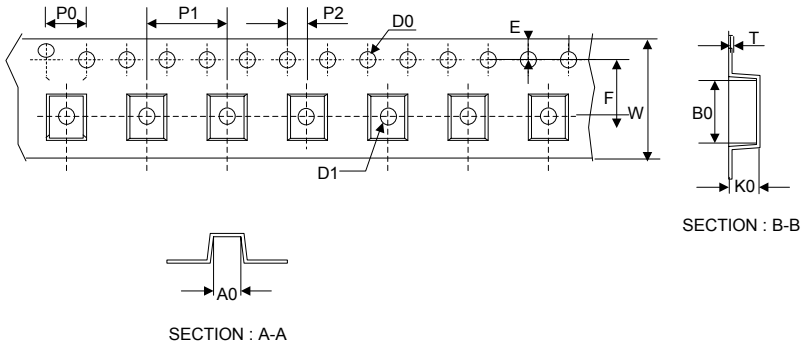


Symbol		A	b	b1	C	D	D1	E	E1	e	e1	H	L
Dimensions (mm)	MIN	1.40	0.44	0.36	0.3	4.40	1.50	2.29	2.00†	1.50 BSC	3.00 BSC	3.94	0.89
	NOM	-	-	-	-	-	-	-	-			-	-
	MAX	1.60	0.56	0.48	0.5	4.60	1.75	2.60	2.29			4.25	1.20

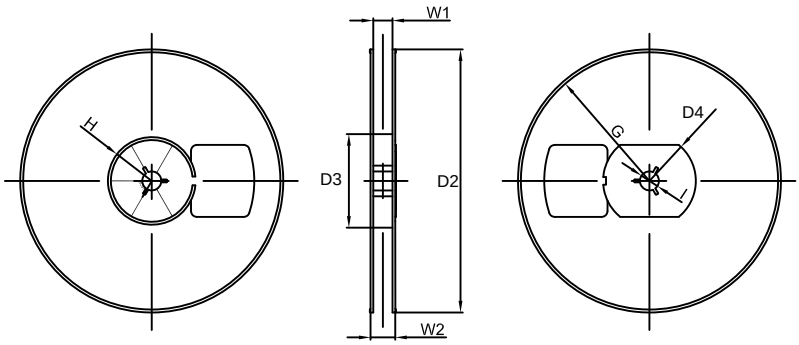
Dimensions	Value (in mm)
C	2.50
G	3.60
X	1.40
X1	0.90
X2	0.90
Y	1.40
Y1	2.60
Y2	1.50
Y3	0.90

Tape & rell specification

Tape



13” Reel



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
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	