



PJ79LxxSQ

3-Terminal Voltage Regulators

Description

The PJ79LxxSQ series of fixed voltage monolithic integrated circuit voltage three-terminal negative regulators are suitable for applications that required supply up to 100mA.

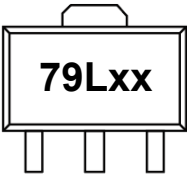
Features

- Input voltage: -30V
- Output voltage: -5V,-6V,-8V,-9V,-12V
- Output current up to 100 mA
- Thermal overload protection
- Short circuit current limiting

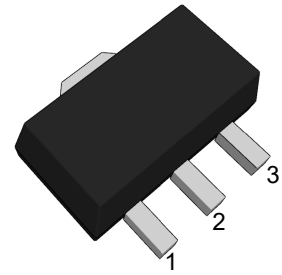
Applications

- TV Board
- Air Conditioner
- Charging Device

Ordering Information

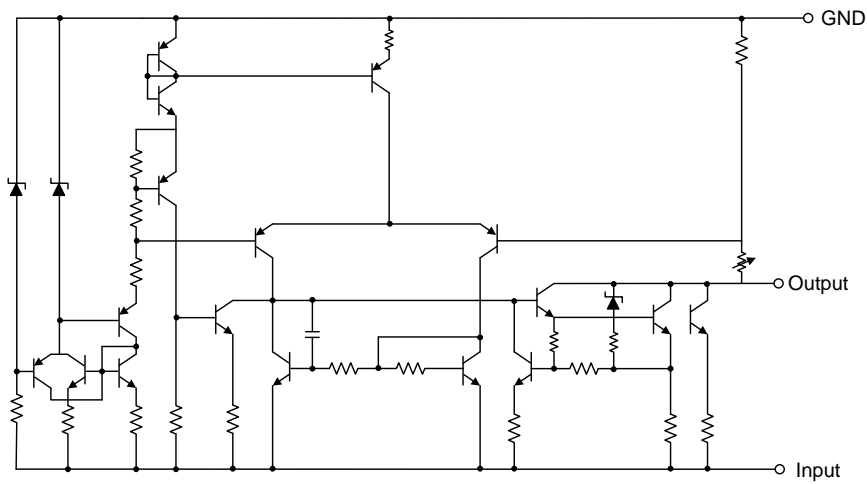
Orderable Device	Package	Reel (inch)	Package Qty (PCS)	Eco Plan ^{Note}	MSL Level	Marking Code
PJ79L05SQ	SOT-89	7/13	1000/3000	RoHS & Green	MSL1	 79Lxx: Product Code e.g. PJ79L05SQ: 79L05
PJ79L06SQ						
PJ79L08SQ						
PJ79L09SQ						
PJ79L12SQ						

SOT-89

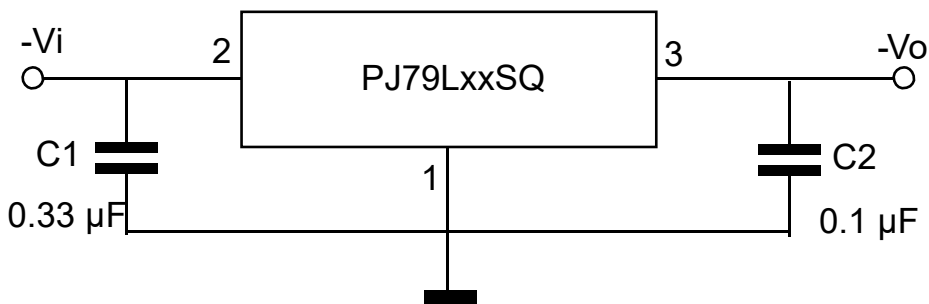


1. GND 2. VIN 3. VOUT

Function Block Diagram



Typical Application Circuit



Absolute Maximum Ratings

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	Value	Unit
Input Voltage	$-V_i$	30	V
Output Current	I_o	100	mA
Maximum Power Dissipation	P_D	500	mW
Junction Temperature	T_J	125	°C
Operating Temperature Range	T_{OPR}	0 to +125	°C
Storage Temperature Range	T_{STG}	-65 to +150	°C



PJ78L05SQ Electrical Characteristics

$V_I = -10V$, $I_O = 40mA$, $0^\circ C \leq T_J \leq 125^\circ C$, $C_I = 0.33\mu F$, $C_O = 0.1\mu F$, unless otherwise specified.

Parameter	Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Output Voltage	$-V_O$	$T_J = 25^\circ C$	4.8	5.0	5.2	V
		$I_O = 1mA$ to $40mA$, $V_I = 7V$ to $20V$	4.75	--	5.25	V
		$I_O = 1mA$ to $70mA$	4.75	--	5.25	V
Line Regulation	ΔV_O	$V_I = -7V$ to $-20V$, $T_J = 25^\circ C$	--	15	150	mV
		$V_I = -8V$ to $-20V$, $T_J = 25^\circ C$	--	12	100	mV
Load Regulation	ΔV_O	$I_O = 1mA$ to $100mA$, $T_J = 25^\circ C$	--	20	60	mV
		$I_O = 1mA$ to $40mA$, $T_J = 25^\circ C$	--	10	30	mV
Ripple Rejection	RR	$V_I = -8V$ to $-18V$, $f = 120Hz$, $T_J = 25^\circ C$	41	49	--	dB
Dropout Voltage	V_D		--	1.7	--	V
Quiescent Current	I_Q	$T_J = 25^\circ C$	--	--	6.0	mA
Quiescent Current Change	ΔI_Q	$V_I = -8V$ to $-20V$	--	--	1.5	mA
		$I_O = 1mA$ to $40mA$	--	--	0.1	mA
Output Noise Voltage	V_N	$10Hz \leq f \leq 100kHz$, $T_J = 25^\circ C$	--	120	--	μV



PJ78L06SQ Electrical Characteristics

$V_I = -12V$, $I_O = 40mA$, $0^\circ C \leq T_J \leq 125^\circ C$, $C_I = 0.33\mu F$, $C_O = 0.1\mu F$, unless otherwise specified.

Parameter	Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Output Voltage	$-V_O$	$T_J = 25^\circ C$	5.76	6.0	6.24	V
		$I_O = 1mA$ to $40mA$, $V_I = -8.5V$ to $-20V$	5.7	--	6.3	V
		$I_O = 1mA$ to $70mA$	5.7	--	6.3	V
Line Regulation	ΔV_O	$V_I = -8.5V$ to $-20V$, $T_J = 25^\circ C$	--	--	150	mV
		$V_I = -9V$ to $-20V$, $T_J = 25^\circ C$	--	--	100	mV
Load Regulation	ΔV_O	$I_O = 1mA$ to $100mA$, $T_J = 25^\circ C$	--	--	60	mV
		$I_O = 1mA$ to $40mA$, $T_J = 25^\circ C$	--	--	30	mV
Ripple Rejection	RR	$V_I = -9V$ to $-20V$, $f = 120Hz$, $T_J = 25^\circ C$	40	--	--	dB
Dropout Voltage	V_D		--	1.7	--	V
Quiescent Current	I_Q	$T_J = 25^\circ C$	--	--	6.0	mA
Quiescent Current Change	ΔI_Q	$V_I = -9V$ to $-20V$	--	--	1.5	mA
		$I_O = 1mA$ to $40mA$	--	--	0.1	mA
Output Noise Voltage	V_N	$10Hz \leq f \leq 100kHz$, $T_J = 25^\circ C$	--	190	--	μV



PJ78L08SQ Electrical Characteristics

$V_I = -14V$, $I_O = 40mA$, $0^\circ C \leq T_J \leq 125^\circ C$, $C_I = 0.33\mu F$, $C_O = 0.1\mu F$, unless otherwise specified.

Parameter	Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Output Voltage	$-V_O$	$T_J = 25^\circ C$	7.68	8.0	8.32	V
		$I_O = 1mA$ to $40mA$, $V_I = -10.5V$ to $-23V$	7.6	--	8.4	V
		$I_O = 1mA$ to $70mA$	7.6	--	8.4	V
Line Regulation	ΔV_O	$V_I = -10.5V$ to $-23V$, $T_J = 25^\circ C$	--	--	175	mV
		$V_I = -11V$ to $-23V$, $T_J = 25^\circ C$	--	--	150	mV
Load Regulation	ΔV_O	$I_O = 1mA$ to $100mA$, $T_J = 25^\circ C$	--	--	80	mV
		$I_O = 1mA$ to $40mA$, $T_J = 25^\circ C$	--	--	50	mV
Ripple Rejection	RR	$V_I = -11V$ to $-21V$, $f = 140Hz$, $T_J = 25^\circ C$	39	--	--	dB
Dropout Voltage	V_D		--	1.7	--	V
Quiescent Current	I_Q	$T_J = 25^\circ C$	--	--	6.0	mA
Quiescent Current Change	ΔI_Q	$V_I = -11V$ to $-23V$	--	--	1.5	mA
		$I_O = 1mA$ to $40mA$	--	--	0.1	mA
Output Noise Voltage	V_N	$10Hz \leq f \leq 100kHz$, $T_J = 25^\circ C$	--	190	--	μV



PJ79LxxSQ

3-Terminal Voltage Regulators

PJ78L09SQ Electrical Characteristics

$V_I = -15V$, $I_O = 40mA$, $0^\circ C \leq T_J \leq 125^\circ C$, $C_I = 0.33\mu F$, $C_O = 0.1\mu F$, unless otherwise specified.

Parameter	Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Output Voltage	$-V_O$	$T_J = 25^\circ C$	8.64	9.0	9.36	V
Line Regulation	ΔV_O	$V_I = 12.5V$ to $24V$, $T_J = 25^\circ C$	--	27	200	mV
Load Regulation	ΔV_O	$I_O = 1mA$ to $100mA$, $T_J = 25^\circ C$	--	12	90	mV
Ripple Rejection	RR	$V_I = 12V$ to $22V$, $f = 150Hz$, $T_J = 25^\circ C$, $e_{in} = 1V_{p-p}$	38	67	--	dB
Dropout Voltage	V_D		--	1.7	--	V
Quiescent Current	I_Q	$T_J = 25^\circ C$	--	--	6.0	mA
Quiescent Current Change	ΔI_Q	$V_I = 12V$ to $22V$	--	--	1.5	mA
		$I_O = 1mA$ to $40mA$	--	--	0.1	mA
Output Noise Voltage	V_N	$10Hz \leq f \leq 100kHz$, $T_J = 25^\circ C$	--	210	--	μV



PJ78L12SQ Electrical Characteristics

$V_I = -19V$, $I_O = 40mA$, $0^\circ C \leq T_J \leq 125^\circ C$, $C_I = 0.33\mu F$, $C_O = 0.1\mu F$, unless otherwise specified.

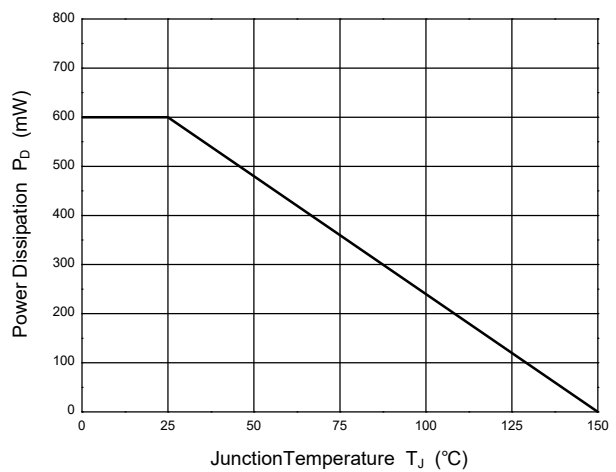
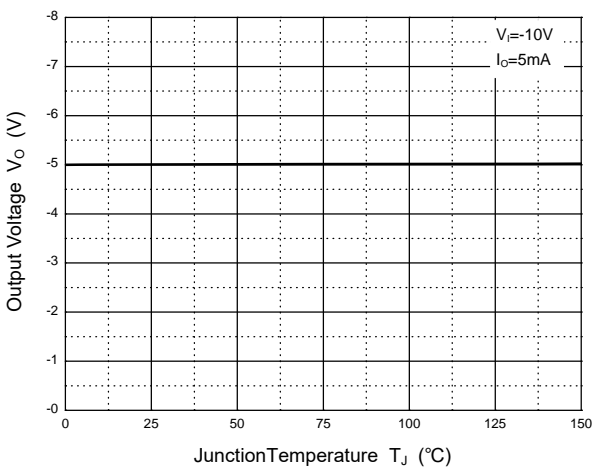
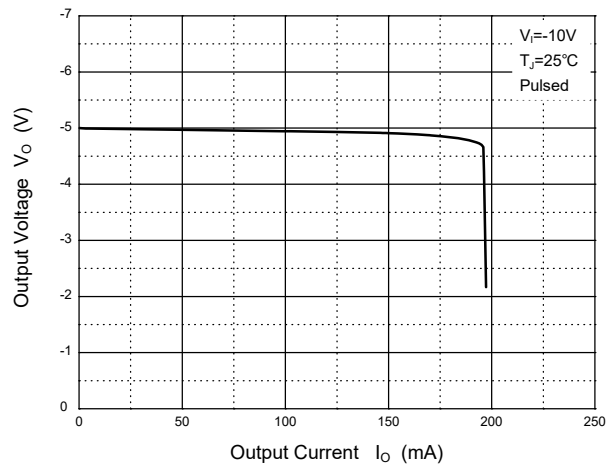
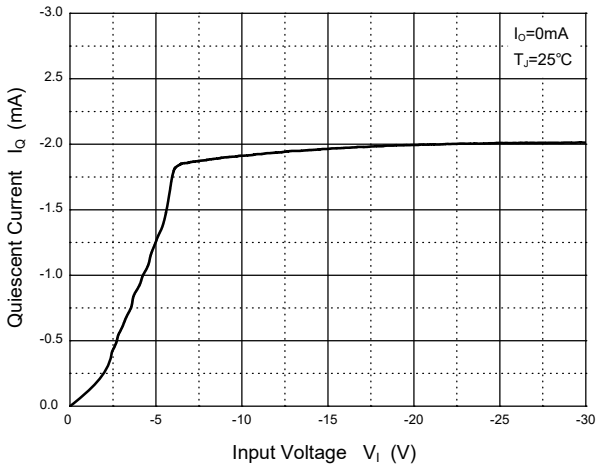
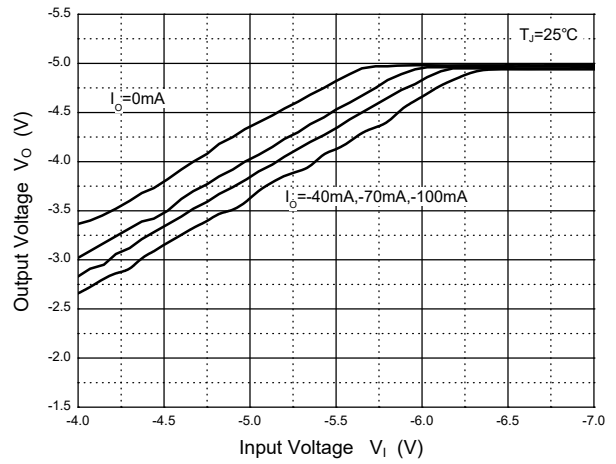
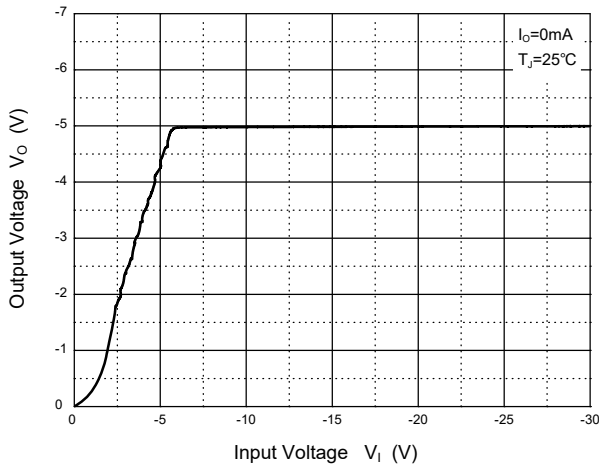
Parameter	Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Output Voltage	$-V_O$	$T_J = 25^\circ C$	11.5	12	12.5	V
Line Regulation	ΔV_O	$V_I = 14.5V$ to $27V$, $T_J = 25^\circ C$	--	--	250	mV
Load Regulation	ΔV_O	$I_O = 1mA$ to $100mA$, $T_J = 25^\circ C$	--	--	100	mV
Ripple Rejection	RR	$V_I = 15V$ to $25V$, $f = 120Hz$, $T_J = 25^\circ C$	36	--	--	dB
Dropout Voltage	V_D		--	1.7	--	V
Quiescent Current	I_Q	$T_J = 25^\circ C$	--	--	6.0	mA
Quiescent Current Change	ΔI_Q	$V_I = 15V$ to $25V$	--	--	1.5	mA
		$I_O = 1mA$ to $40mA$	--	--	0.1	mA
Output Noise Voltage	V_N	$10Hz \leq f \leq 100kHz$, $T_J = 25^\circ C$	--	290	--	μV



PJ79LxxSQ

3-Terminal Voltage Regulators

Typical Characteristic Curves(PJ79L05SQ)





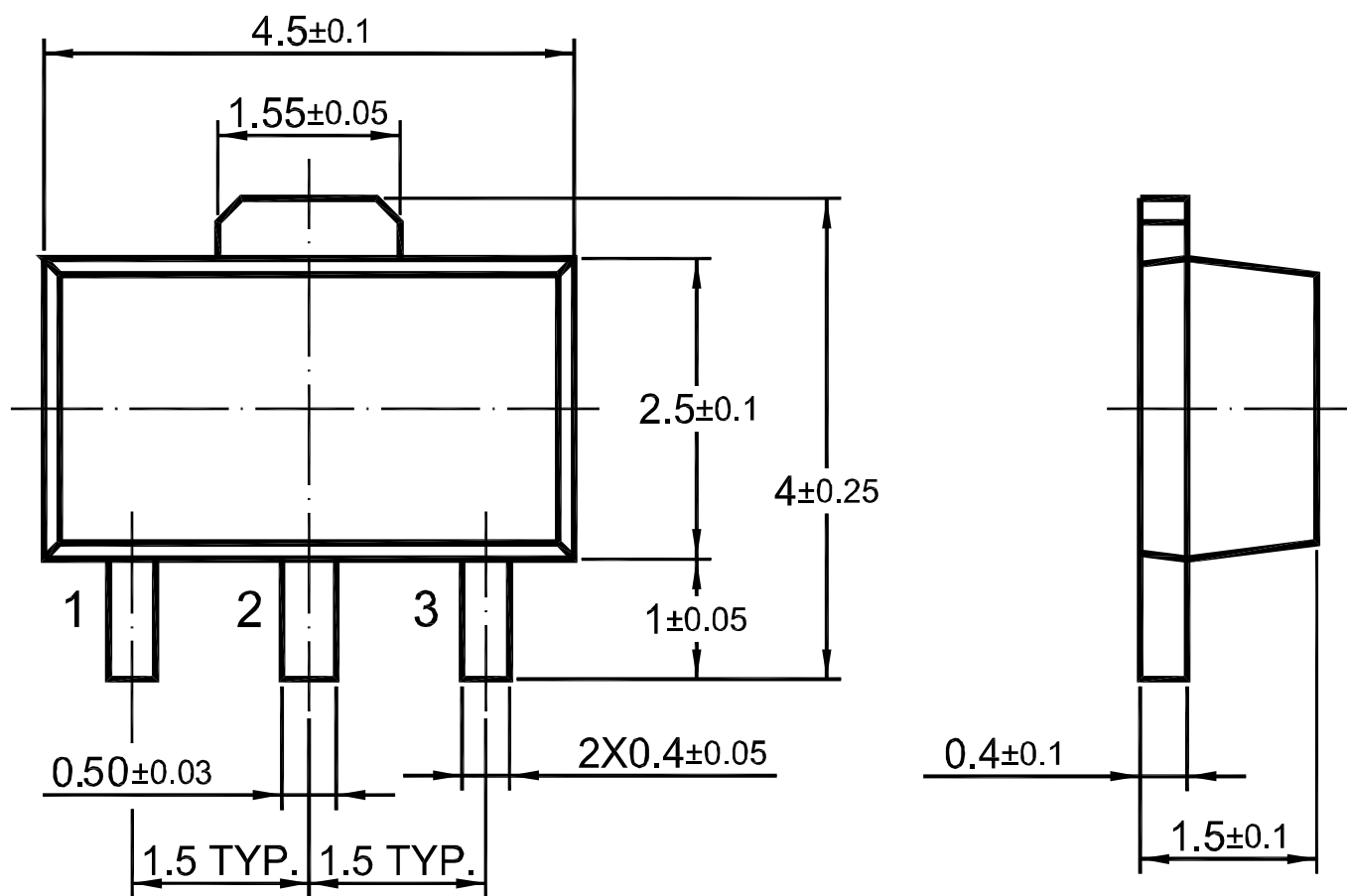
PJ79LxxSQ

3-Terminal Voltage Regulators

Package Outline

SOT-89

Dimensions in mm



单击下面可查看定价，库存，交付和生命周期等信息

[>>PJSEMI\(平晶微\)](#)