



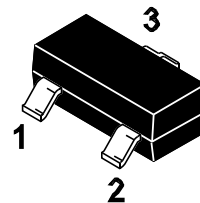
PJ78L05SA-N

3-Terminal Voltage Regulator

Features

- Input voltage: up to 35V
- Output voltage: 5V
- Output current up to 100 mA, internal thermal overload protection and short-circuit current limiting.

SOT-23



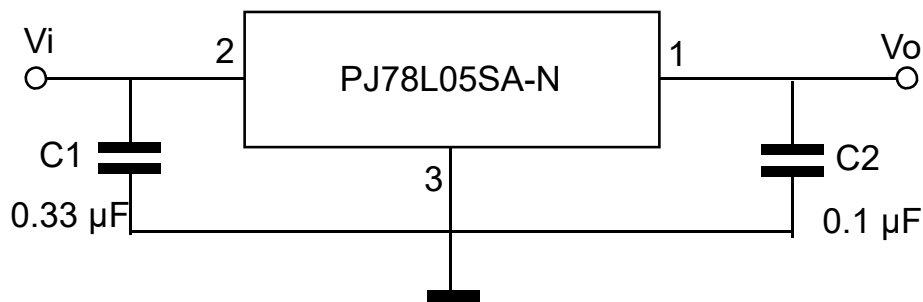
1. VOUT 2. VIN 3. GND

Marking Code : P805

Absolute Maximum Ratings

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	Value	Unit
Input Voltage	V_I	35	V
Output Current	I_O	100	mA
Junction Temperature	T_J	150	°C
Storage Temperature Range	T_{STG}	-55 to +150	°C





PJ78L05SA-N

3-Terminal Voltage Regulator

Electrical Characteristics

Ratings at $T_J=25^{\circ}\text{C}$, unless otherwise specified.

Parameter	Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Output Voltage	V_O	$V_I=10\text{V}, I_O=40\text{mA}$	4.85	5.0	5.15	V
		$I_O=1\text{mA to } 40\text{mA},$ $V_I=7\text{V to } 25\text{V}$	4.8	5.0	5.2	V
		$I_O=1\text{mA to } 100\text{mA}$	4.75	5.0	5.25	V
Line Regulation	ΔV_O	$V_I=7\text{V to } 25\text{V}, T_J=25^{\circ}\text{C}$	--	18	75	mV
		$V_I=8\text{V to } 25\text{V}, T_J=25^{\circ}\text{C}$	--	10	54	mV
Load Regulation	ΔV_O	$I_O=1\text{mA to } 100\text{mA}, T_J=25^{\circ}\text{C}$	--	20	60	mV
		$I_O=1\text{mA to } 40\text{mA}, T_J=25^{\circ}\text{C}$	--	5	30	mV
Ripple Rejection	RR	$V_I=8\text{V to } 16\text{V},$ $f=100\text{Hz}, T_J=25^{\circ}\text{C}$	47	62	--	dB
Quiescent Current	I_Q		--	3.75	6	mA
Quiescent Current Change	ΔI_Q	$V_I=8\text{V to } 25\text{V}$	--	--	1.0	mA
		$I_O=1\text{mA to } 40\text{mA}$	--	--	0.3	mA
Output Noise Voltage	V_N	$10\text{Hz}\leq f\leq 100\text{KHz}, T_J=25^{\circ}\text{C}$	--	40	--	μV



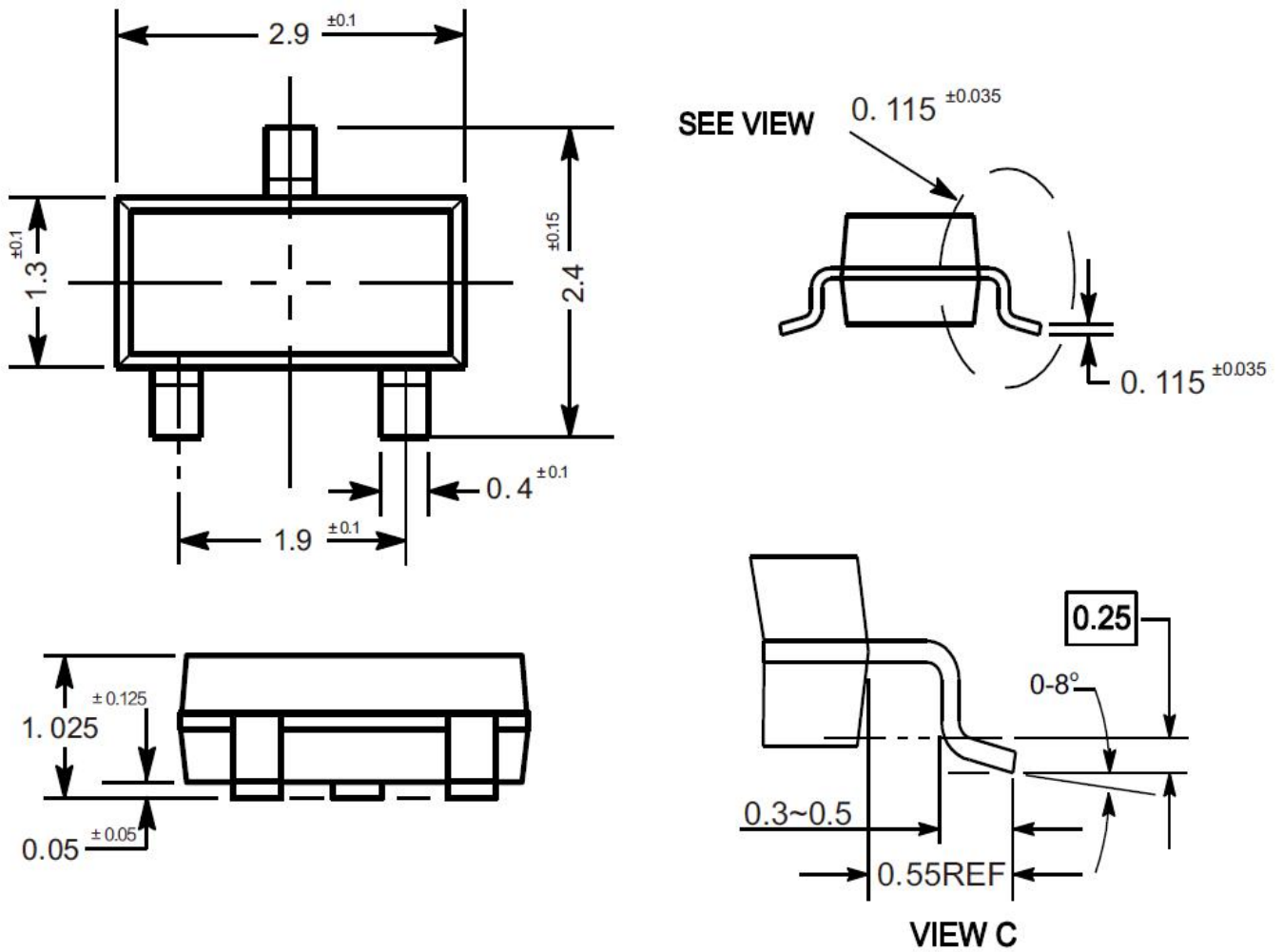
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3-Terminal Voltage Regulator

Package Outline

SOT-23

Dimensions in mm



Ordering Information

Device	Package	Shipping
PJ78L05SA-N	SOT-23	3,000PCS/Reel&7inches