

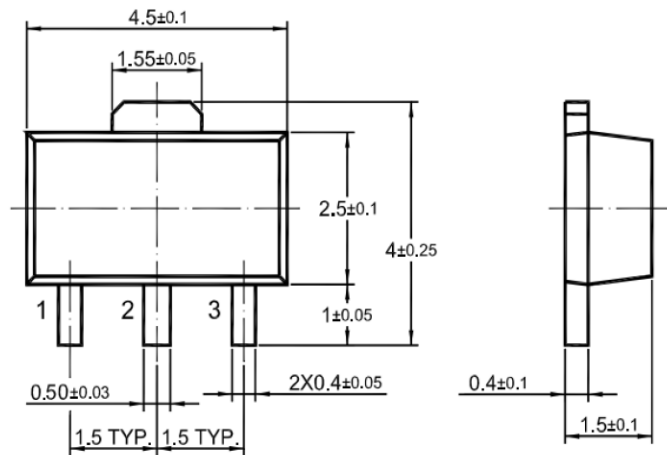
Adjustable Voltage Regulator

Primary characteristics		
Parameter	Value	Unit
Output voltage	4.8 ~ 5.2	V
Output current	100	mA

Features

- Pb-free and RoHS compliant
- 0.1% line and load regulation voltages
- Complete series of protections:
Current limiting;
Thermal shutdown;

Case dimensions

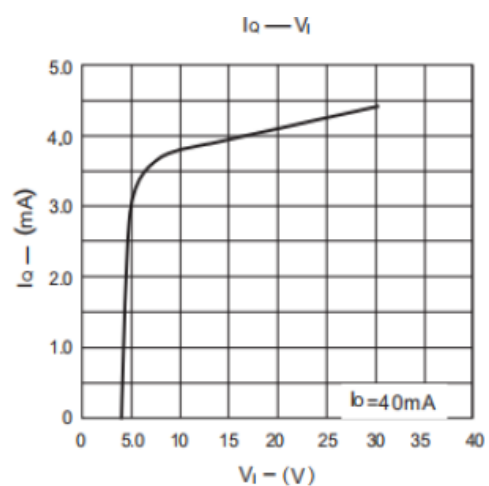
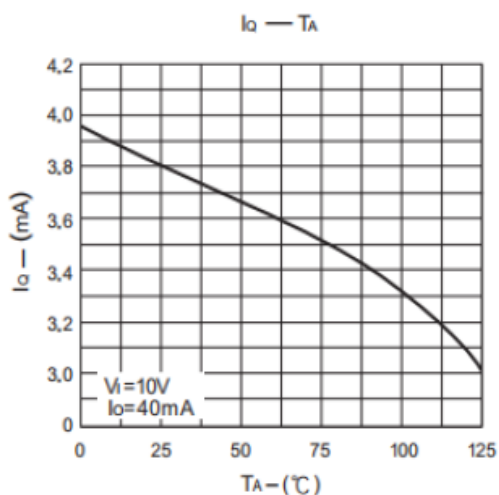
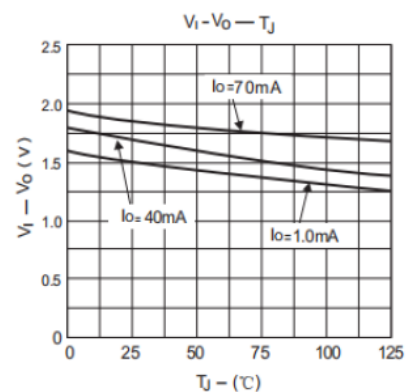
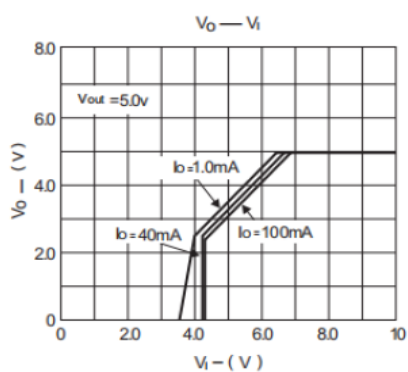


SOT-89

Absolute maximum ratings

Parameter	Symbol	Rating	Unit
Input-output voltage differential	$V_{IN}-V_{OUT}$	30	V
Output current	I_o	100	mA
Operating temperature	T_{OPR}	-40 ~ +125	°C
Storage Temperature	T_{STG}	-55 ~ +150	°C

Electrical characteristics							
Rating at T_A unless otherwise specified							
Parameter	Symbol	Test conditions		Min.	Typ.	Max.	Unit
Line regulation	$\Delta V_{OUT}/V_{OUT}$	$7V \leq V_{IN} - V_{OUT} \leq 20V$		-	-	0.04	%/V
Load regulation	ΔV_{OUT}	$10mA \leq I_{OUT} \leq 1.5A$; $T_J = 25^\circ C$	$V_{OUT} \leq 5V$	-	32	150	mV
Ripple rejection	RR	$V_I = 8V$ to $18V$ $T_J = 25^\circ C$ $f = 120Hz$		41	49	-	dB
Output noise voltage	eN	$F = 10Hz \sim 100kHz$ $T_J = 25^\circ C$		-	42	-	μV
Dropout Voltage	V_D	$T_J = 25^\circ C$		-	1.70	-	V
Quiescent Current	I_Q	$T_J = 25^\circ C$		-	3.8	6	mA
		$T_J = 125^\circ C$		-	-	5.5	mA
Quiescent Current Change		$V_I = 8V$ to $20V$		-	-	1.5	mA
		$I_O = 1mA$ to $40mA$		-	-	0.1	mA

Ratings and characteristic curves


Ordering information			
Part Number	Package	Shipping Quantity	Dimensions
AKS78L05	SOT-89	1000	---

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