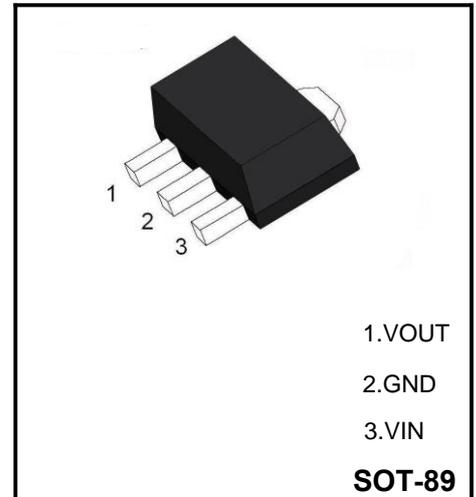


**Features**

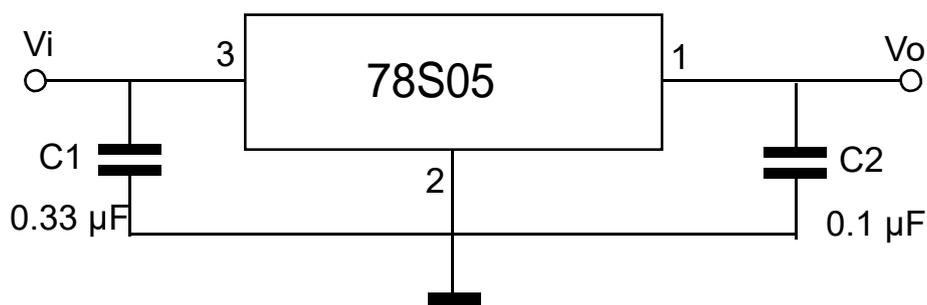
- Input voltage: up to 35V
- Output voltage: 5V
- Output current up to 200 mA, internal thermal overload protection and short-circuit current limiting.



**Absolute Maximum Ratings (Ta=25°C)**

Parameter	Symbol	Value	Unit
Input Voltage	$V_I$	35	V
Output Current	$I_O$	200	mA
Maximum Power Dissipation	$P_D$	500	mW
Thermal Resistance Junction-Air	$R_{\theta JA}$	250	°C/W
Junction Temperature	$T_J$	150	°C
Operating Temperature Range	$T_{OPR}$	-40 to +125	°C
Storage Temperature Range	$T_{STG}$	-55 to +150	°C

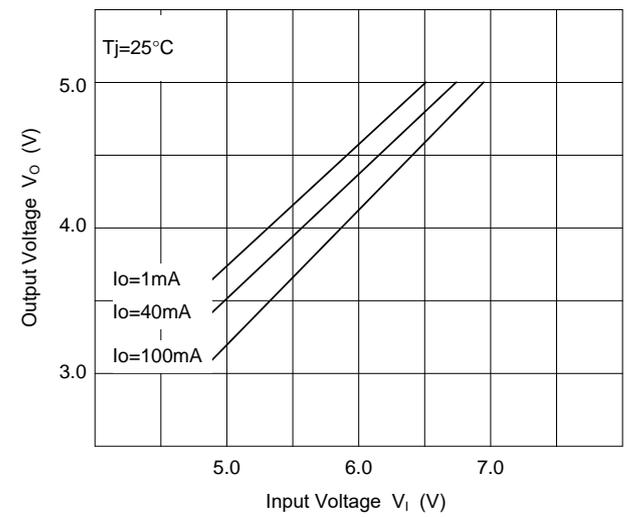
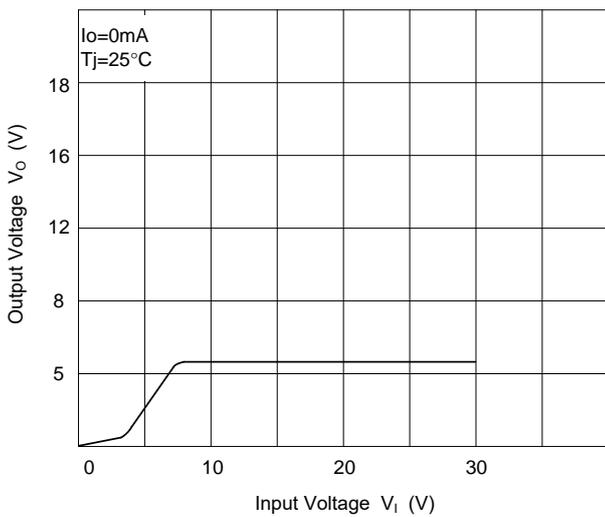
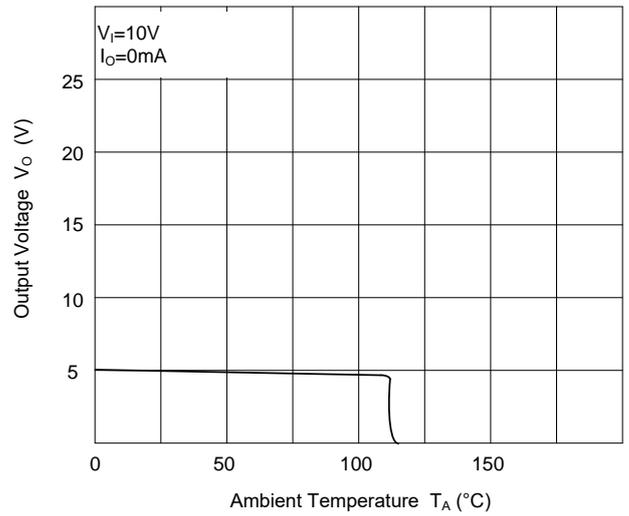
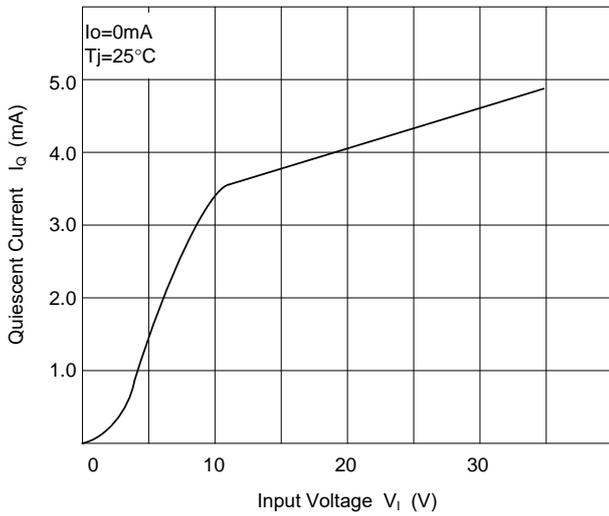
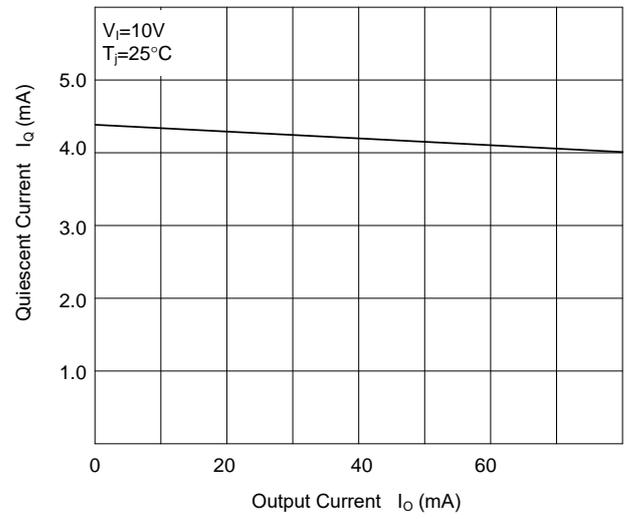
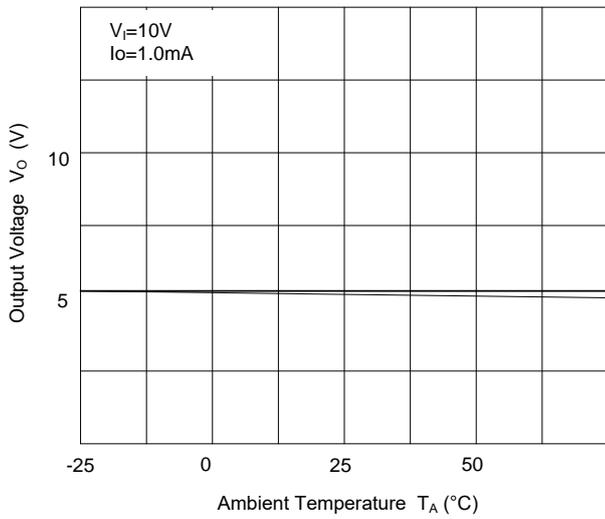
**Typical applications**



**Electrical Characteristics (Ta=25°C, unless otherwise specified)**

Parameter	Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Output Voltage	V <sub>o</sub>	T <sub>J</sub> =25°C	4.80	5.0	5.2	V
		I <sub>o</sub> =1mA to 40mA, V <sub>i</sub> =7V to 20V	4.75	5.0	5.25	V
		I <sub>o</sub> =1mA to 70mA, V <sub>i</sub> =10V	4.75	5.0	5.25	V
Line Regulation	ΔV <sub>o</sub>	V <sub>i</sub> =7V to 20V, T <sub>J</sub> =25°C	--	8	150	mV
		V <sub>i</sub> =8V to 20V, T <sub>J</sub> =25°C	--	6	100	mV
Load Regulation	ΔV <sub>o</sub>	I <sub>o</sub> =1mA to 100mA, T <sub>J</sub> =25°C	--	11	60	mV
		I <sub>o</sub> =1mA to 40 mA, T <sub>J</sub> =25°C	--	5	30	mV
Ripple Rejection	RR	V <sub>i</sub> =8V to 20V, f=120Hz, T <sub>J</sub> =25°C	40	49	--	dB
Dropout Voltage	V <sub>D</sub>	T <sub>J</sub> =25°C	--	1.7	--	V
Quiescent Current	I <sub>q</sub>		--	2	5.5	mA
Quiescent Current Change	ΔI <sub>q</sub>	V <sub>i</sub> =8V to 20V	--	--	1.5	mA
		I <sub>o</sub> =1mA to 40mA	--	--	0.1	mA
Output Noise Voltage	V <sub>N</sub>	10Hz≤f≤100KHz	--	40	--	μV

**Typical Characteristics**



**Ordering information**

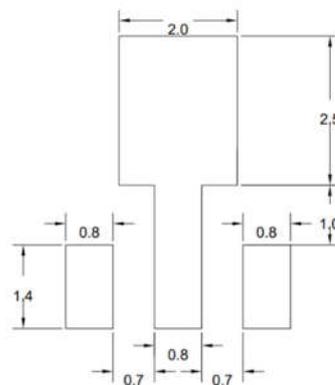
Package	Packing Description	Base Quantity	Packing Quantity
SOT-89	Tape/Reel,7"reel	1000pcs/Reel	6000PCS/Box 30000PCS/Carton

**Package Dimensions**

**SOT-89**

Dim	Millimeter		Inches	
	Min.	Max.	Min.	Max.
A	1.40	1.60	0.055	0.063
b	0.32	0.52	0.013	0.020
b1	0.38	0.58	0.015	0.023
c	0.35	0.45	0.014	0.018
D	4.40	4.60	0.173	0.181
D1	1.45	1.65	0.057	0.065
D2	1.70	1.80	0.067	0.071
E	2.30	2.60	0.091	0.102
E1	3.95	4.25	0.156	0.167
E2	1.80	2.00	0.071	0.079
e	1.40	1.60	0.055	0.063
e1	2.80	3.20	0.110	0.126
L	0.90	1.20	0.035	0.047

**The recommended mounting pad size**



UNIT:MM

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