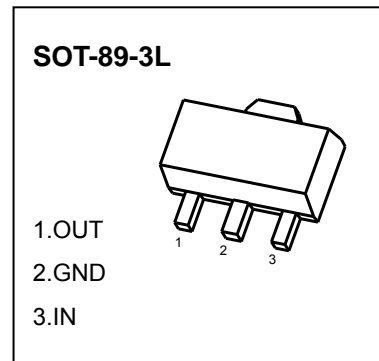


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FEATURES

- Maximum output current
I_O: 100mA
- Output voltage
V_O: 5 V
- Continuous total dissipation
P_D: Internal limited



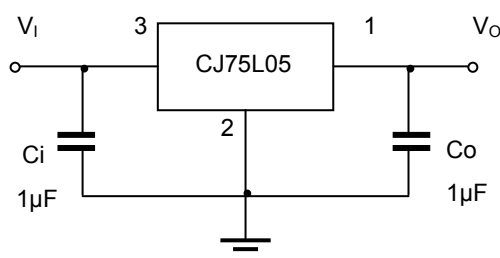
ABSOLUTE MAXIMUM RATINGS (Operating temperature range applies unless otherwise specified)

Parameter	Symbol	Value	Unit
Input Voltage Range	V _I	-0.3~+40	V
Operating Ambient Temperature Range	T _{OPR}	-40~+85	°C
Storage Temperature Range	T _{STG}	-55~+150	°C

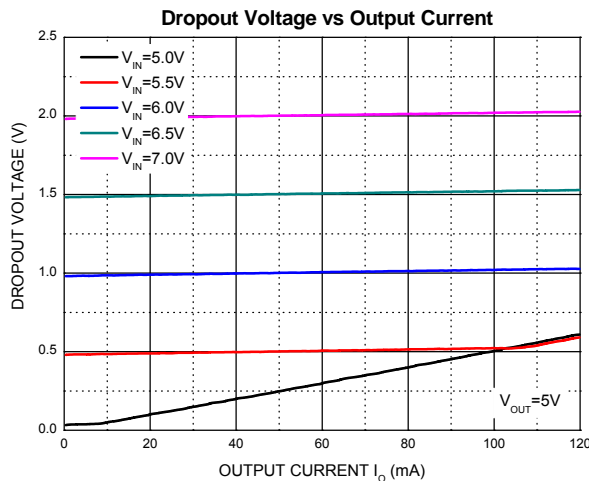
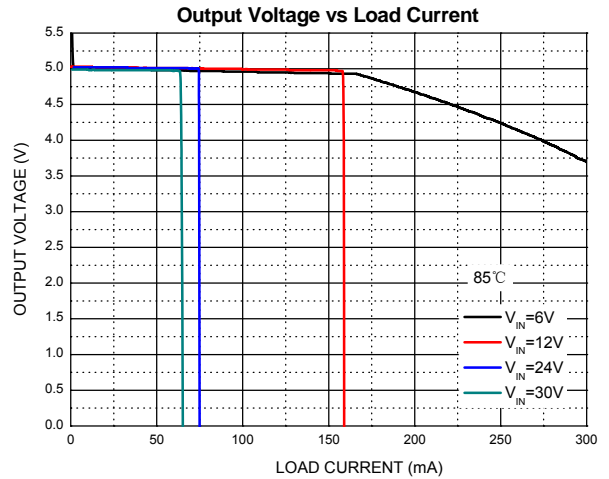
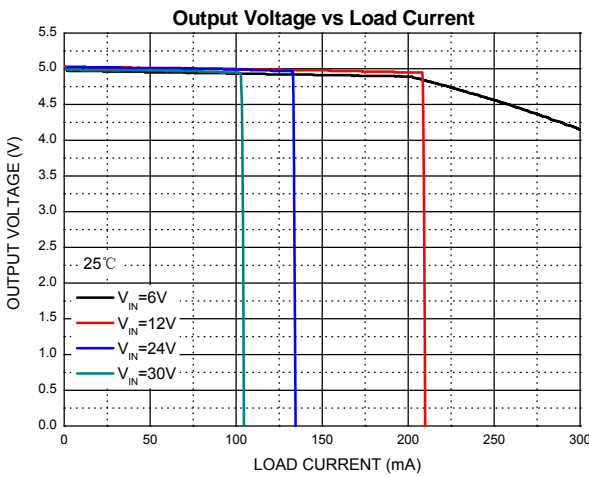
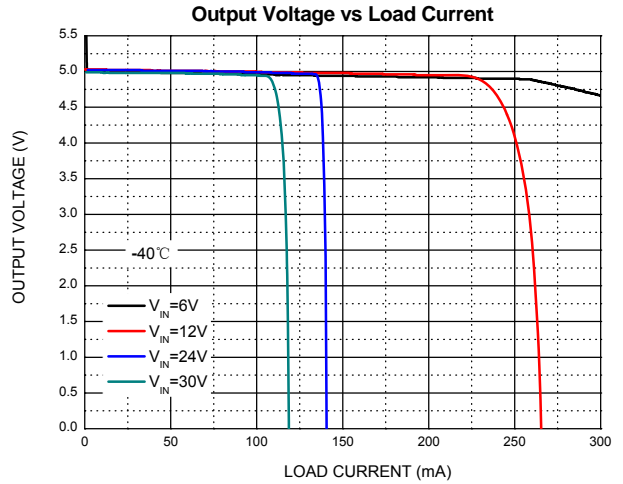
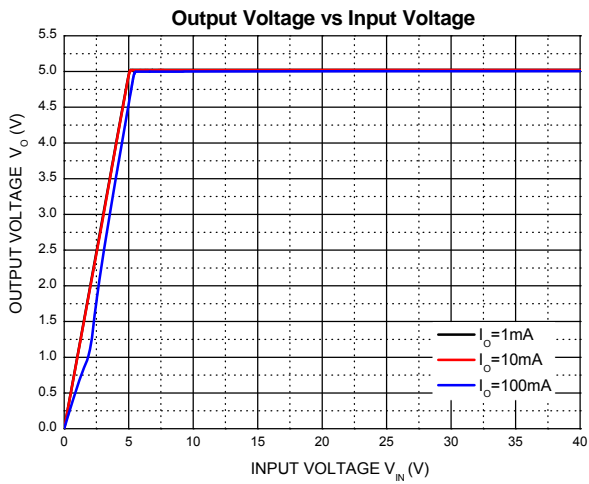
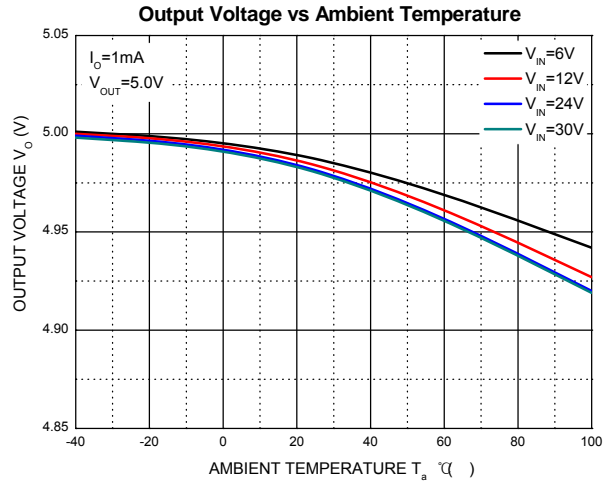
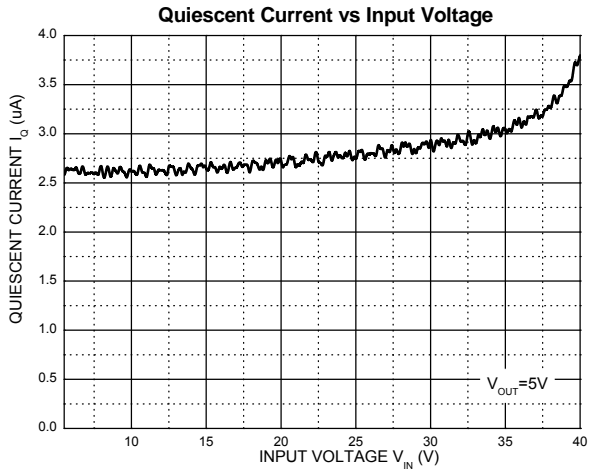
ELECTRICAL CHARACTERISTICS (V_I=7V, C_i=C_o=1μF, T_a=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Input voltage	V _I		2.5		36	V
Output voltage	V _O	V _I =7V, I _o =10mA	4.9	5	5.1	V
Load regulation	ΔV _o	I _o =1mA-100mA		10		mV
Line regulation	ΔV _o	6V ≤ V _I ≤ 36V, V _O =5V, I _o =10mA		0.01	0.3	%/V
Quiescent current	I _q	V _I =7V, No load		2	5	μA
Dropout Voltage	V _d	I _o =100mA, V _{OUT} =5V		500		mV
Output noise voltage	V _N	BW=10Hz to 100kHz		135		μV _{RMS}
Ripple rejection	RR	V _I =7V, V _{PP} =0.5V, I _o =1mA	f=100Hz	80		dB
			f=1kHz	70		
			f=10kHz	60		
			f=100kHz	40		
Short current	I _{SC}	V _{OUTPUT} =V _{SS}		25		mA
Output Current Limit	I _{PK}	V _{OUT} = 0.5xV _{OUT(Normal)} , V _{IN} =5V	250	400		mA
Thermal protection	T _{SD}	I _o =1mA		150		°C
Thermal protection Hys	T _{SD_HYS}	I _o =1mA		20		°C
Temperature coefficient	ΔV _O /ΔT	I _o =1mA		±0.5		mV/°C

TYPICAL APPLICATION

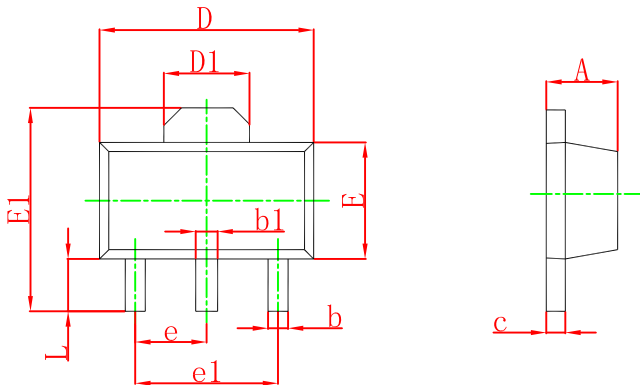


Typical Characteristics



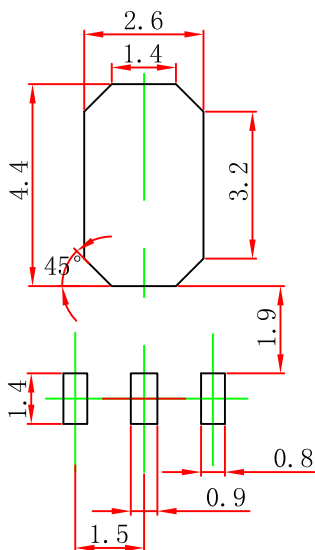
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SOT-89-3L Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	1.400	1.600	0.055	0.063
b	0.320	0.520	0.013	0.020
b1	0.400	0.580	0.016	0.023
c	0.350	0.440	0.014	0.017
D	4.400	4.600	0.173	0.181
D1	1.550 REF.		0.061 REF.	
E	2.300	2.600	0.091	0.102
E1	3.940	4.250	0.155	0.167
e	1.500 TYP.		0.060 TYP.	
e1	3.000 TYP.		0.118 TYP.	
L	0.900	1.200	0.035	0.047

SOT-89-3L Suggested Pad Layout



Note:
 1. Controlling dimension: in millimeters.
 2. General tolerance: ±0.05mm.
 3. The pad layout is for reference purposes only.