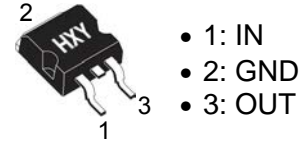




Features

- Maximum output current I_{OM} : 1A
- Output voltage V_O : 5V
- Continuous total dissipation P_D : 1.5 W ($T_a=25^\circ\text{C}$)



TO-263S
(TO-263-2)

Maxmim Ratings ($T_a=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Value	Unit
Input Voltage	V_i	35	V
Thermal Resistance from Junction to Air	$R_{\theta JA}$	66.7	$^\circ\text{C/W}$
Operating Junction Temperature Range	T_{OPR}	-25~+125	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-65~+150	$^\circ\text{C}$

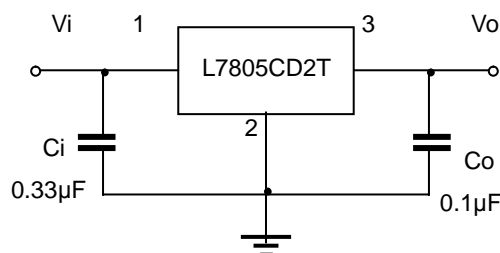
Electrcal Charcteristics ($T_a=25^\circ\text{C}$ unless otherwise specified)

($V_i=10\text{V}$, $I_o=500\text{mA}$, $C_i=2.2\mu\text{F}$, $C_o=1\mu\text{F}$, unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Output voltage	V_o	25°C	4.8	5.0	5.2	V
		$7\text{V} \leq V_i \leq 20\text{V}$, $I_o=5\text{mA}-1\text{A}$	-25-125 $^\circ\text{C}$	4.75	5.00	5.25
Load Regulation	ΔV_o	$I_o=5\text{mA}-1\text{A}$	25°C	9	100	mV
		$I_o=250\text{mA}-750\text{mA}$	25°C	4	50	mV
Line regulation	ΔV_o	$7\text{V} \leq V_i \leq 25\text{V}$	25°C	4	100	mV
		$8\text{V} \leq V_i \leq 12\text{V}$	25°C	1.6	50	mV
Quiescent Current	I_q	25°C	5	8	mA	
Quiescent Current Change	ΔI_q	$7\text{V} \leq V_i \leq 25\text{V}$	-25-125 $^\circ\text{C}$	0.3	1.3	mA
		$5\text{mA} \leq I_o \leq 1\text{A}$	-25-125 $^\circ\text{C}$	0.03	0.5	mA
Output Noise Voltage	V_N	$10\text{Hz} \leq f \leq 100\text{KHz}$	25°C	42		$\mu\text{V}/V_o$
Output voltage drift	$\Delta V_o/\Delta T$	$I_o=5\text{mA}$	-25-125 $^\circ\text{C}$	-1.1		$\text{mV}/^\circ\text{C}$
Ripple Rejection	RR	$8\text{V} \leq V_i \leq 18\text{V}$, $f=120\text{Hz}$	-25-125 $^\circ\text{C}$	62	73	dB
Dropout Voltage	V_d	$I_o=1\text{A}$	25°C	2		V
Output resistance	R_o	$f=1\text{KHz}$	-25-125 $^\circ\text{C}$	10		$\text{m}\Omega$
Short Circuit Current	I_{sc}	25°C		230		mA
Peak Current	I_{pk}	25°C		2.2		A

* Pulse test.

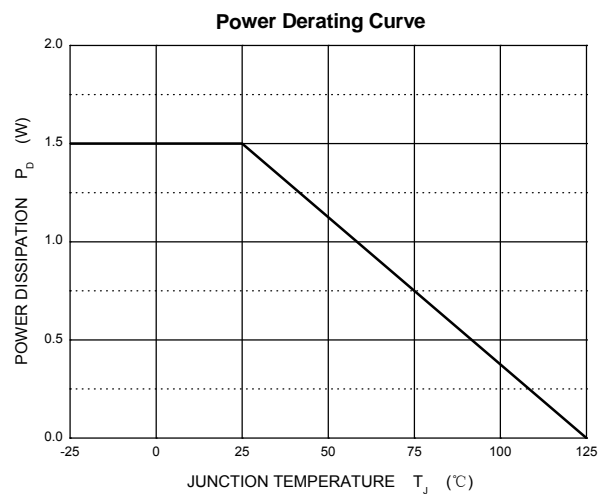
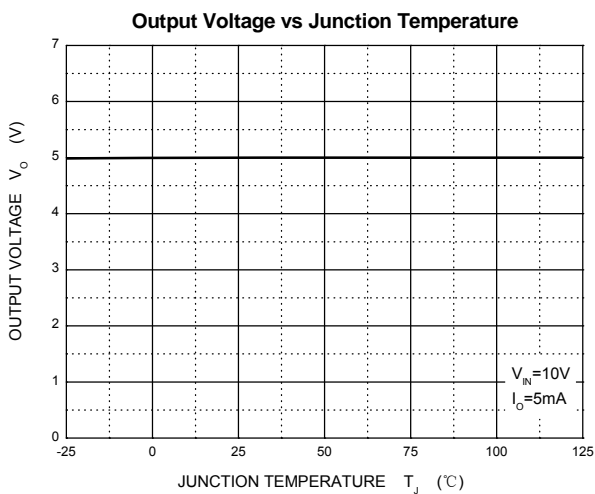
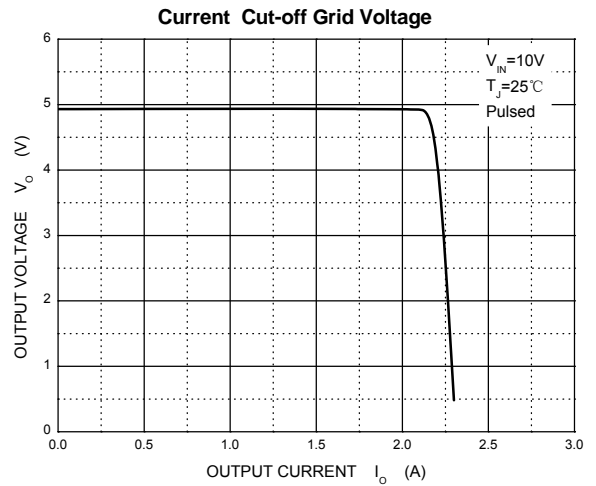
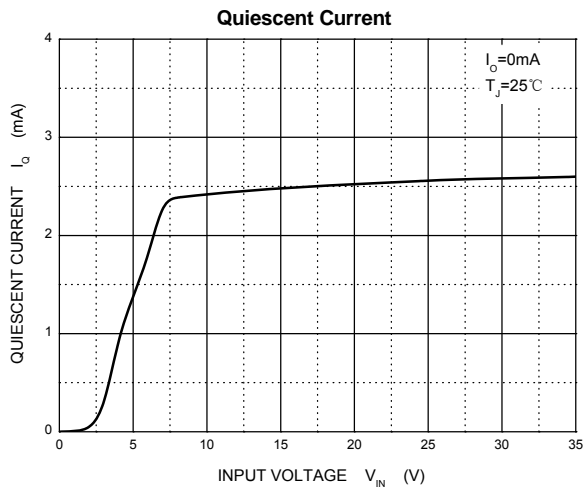
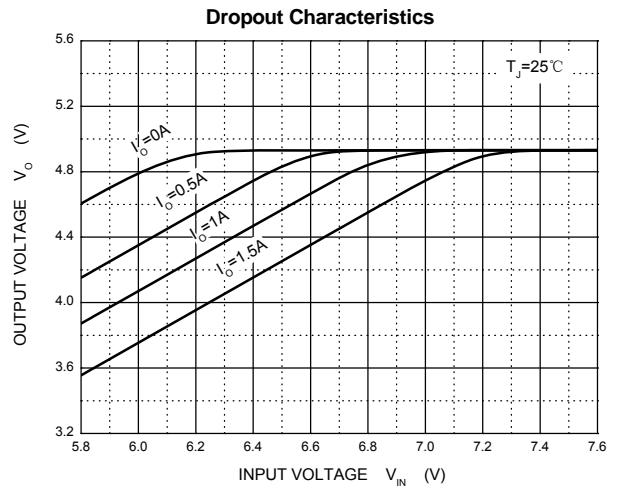
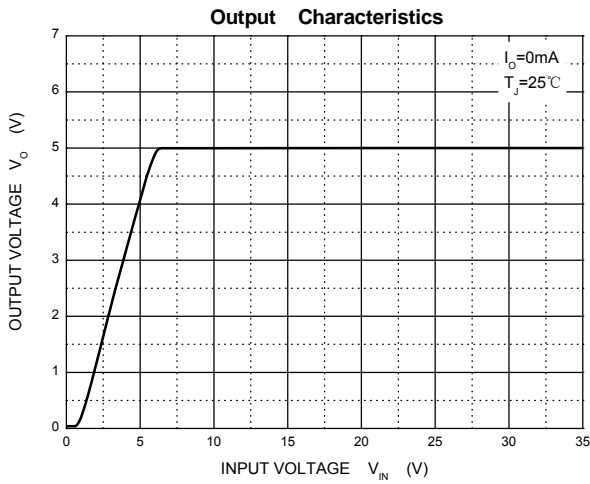
Typical Application



Note: Bypass capacitors are recommended for optimum stability and transient response and should be located as close as possible to the regulators.

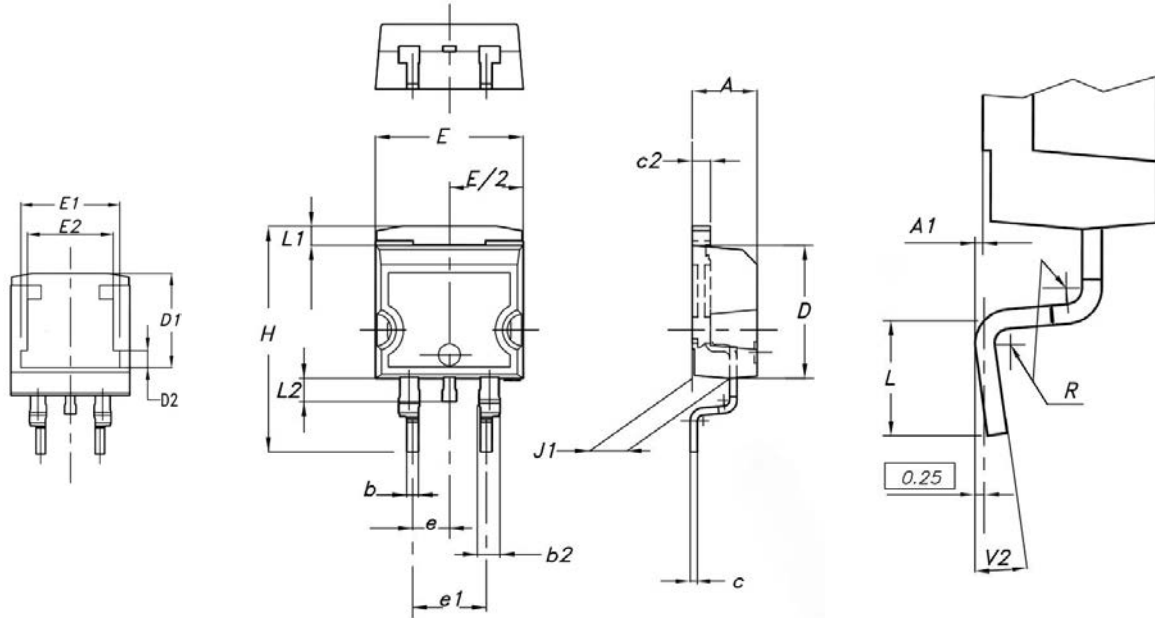


Typical Characteristics





Package Information
TO-263S(TO-263-2)



Dim.	mm		
	Min.	Typ.	Max.
A	4.40		4.60
A1	0.03		0.23
b	0.70		0.93
b2	1.14		1.70
c	0.45		0.60
c2	1.23		1.36
D	8.95		9.35
D1	7.50	7.75	8.00
D2	1.10	1.30	1.50
E	10		10.40
E1	8.50	8.70	8.90
E2	6.85	7.05	7.25
e		2.54	
e1	4.88		5.28
H	15		15.85
J1	2.49		2.69
L	2.29		2.79
L1	1.27		1.40
L2	1.30		1.75
R		0.4	
V2	0°		8°



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