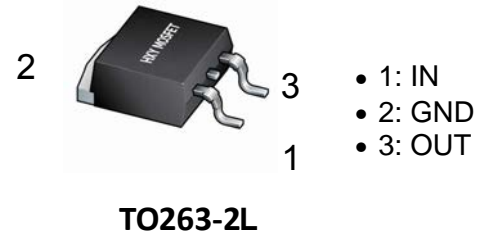




## FEATURES

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



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

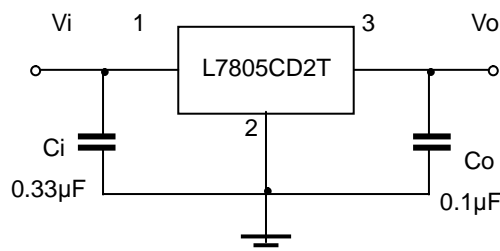
Parameter	Symbol	Value	Unit
Input Voltage	$V_i$	35	V
Thermal Resistance from Junction to Air	$R_{\theta JA}$	66.7	$^\circ\text{C/W}$
Operating Junction Temperature Range	$T_{OPR}$	-25~+125	$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-65~+150	$^\circ\text{C}$

## ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JUNCTION TEMPERATURE ( $V_i=10\text{V}, I_o=500\text{mA}, C_i=0.33\mu\text{F}, C_o=0.1\mu\text{F}$ , unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Output voltage	$V_o$	$25^\circ\text{C}$	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	V
Load Regulation	$\Delta V_o$	$I_o=5\text{mA}-1\text{A}$ $25^\circ\text{C}$		9	100	mV
		$I_o=250\text{mA}-750\text{mA}$ $25^\circ\text{C}$		4	50	mV
Line regulation	$\Delta V_o$	$7\text{V} \leq V_i \leq 25\text{V}$ $25^\circ\text{C}$		4	100	mV
		$8\text{V} \leq V_i \leq 12\text{V}$ $25^\circ\text{C}$		1.6	50	mV
Quiescent Current	$I_q$	$25^\circ\text{C}$		5	8	mA
Quiescent Current Change	$\Delta I_q$	$7\text{V} \leq V_i \leq 25\text{V}$ $-25-125^\circ\text{C}$		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	$V_N$	$10\text{Hz} \leq f \leq 100\text{KHz}$ $25^\circ\text{C}$		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	$V_d$	$I_o=1\text{A}$ $25^\circ\text{C}$		2		V
Output resistance	$R_o$	$f=1\text{KHz}$ $-25-125^\circ\text{C}$		10		$\text{m}\Omega$
Short Circuit Current	$I_{sc}$	$25^\circ\text{C}$		230		mA
Peak Current	$I_{pk}$	$25^\circ\text{C}$		2.2		A

\* Pulse test.

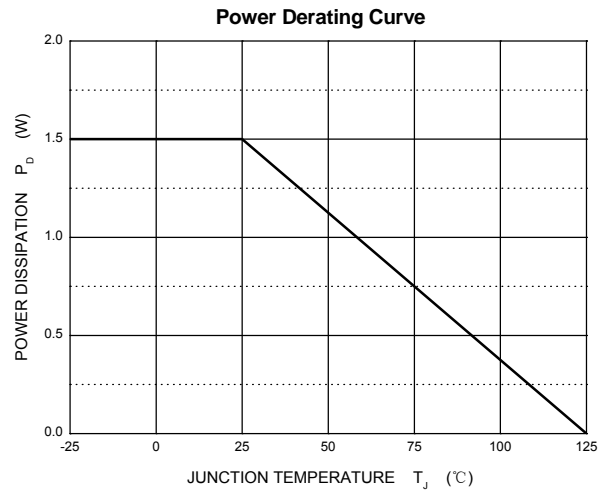
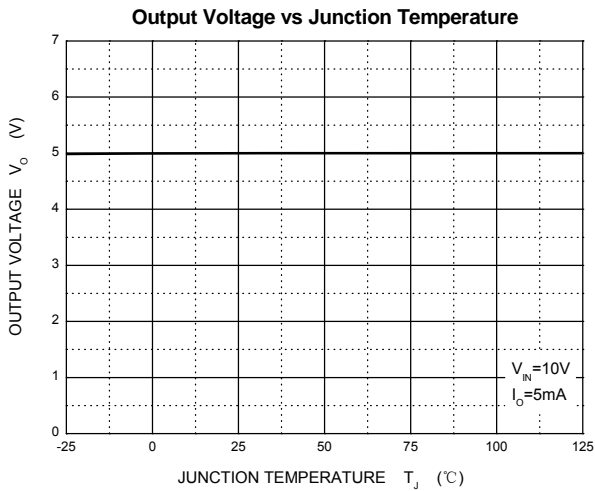
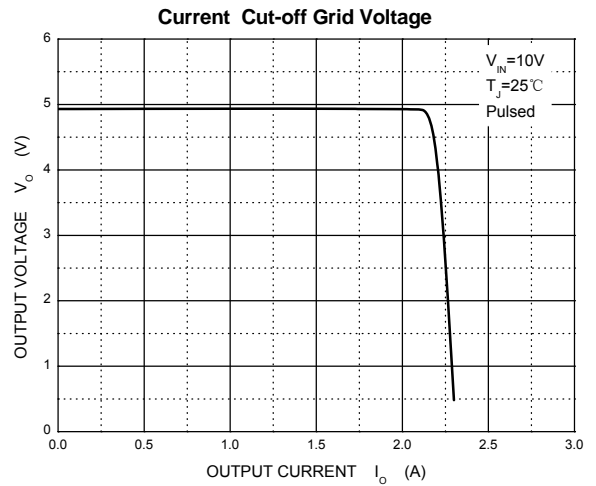
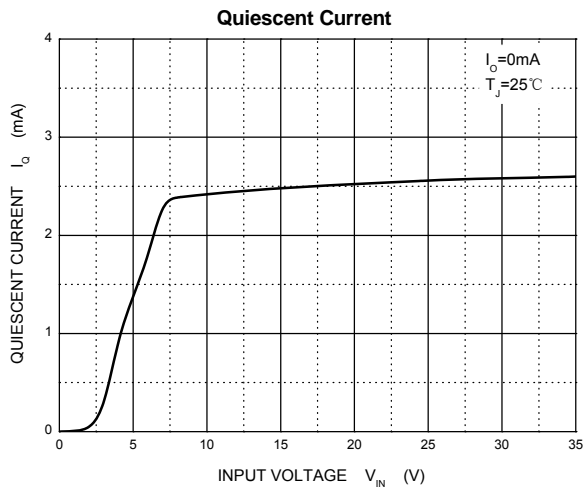
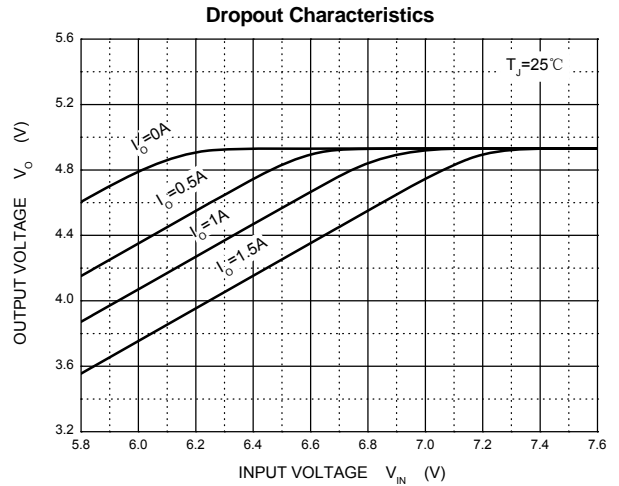
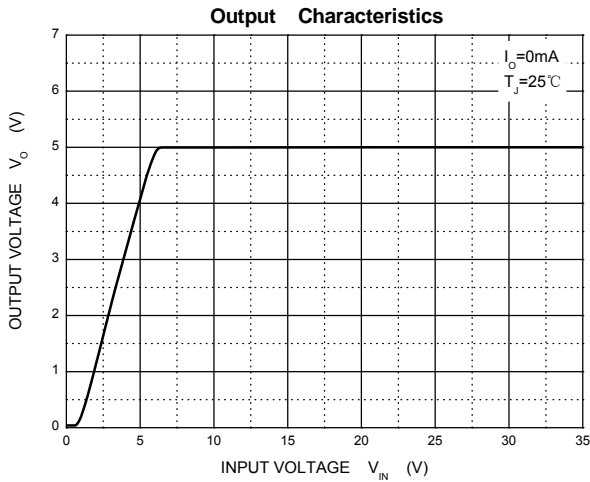
## TYPICAL APPLICATION



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

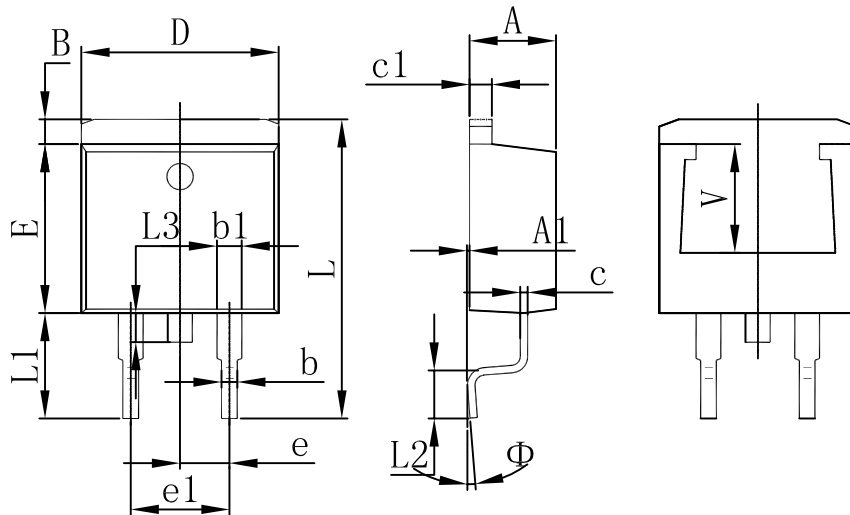


### Typical Characteristics





**TO-263 Package Outline Dimensions**



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	4.470	4.670	0.176	0.184
A1	0.000	0.150	0.000	0.006
B	1.120	1.420	0.044	0.056
b	0.710	0.910	0.028	0.036
b1	1.170	1.370	0.046	0.054
c	0.310	0.530	0.012	0.021
c1	1.170	1.370	0.046	0.054
D	10.010	10.310	0.394	0.406
E	8.500	8.900	0.335	0.350
e	2.540 TYP.		0.100 TYP.	
e1	4.980	5.180	0.196	0.204
L	14.940	15.500	0.588	0.610
L1	4.950	5.450	0.195	0.215
L2	2.340	2.740	0.092	0.108
L3	1.300	1.700	0.051	0.067
Φ	0°	8°	0°	8°
V	5.600 REF.		0.220REF.	



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