

/ Descriptions

TO-263

Voltage Regulator in a TO-263 Plastic Package.

/ Features

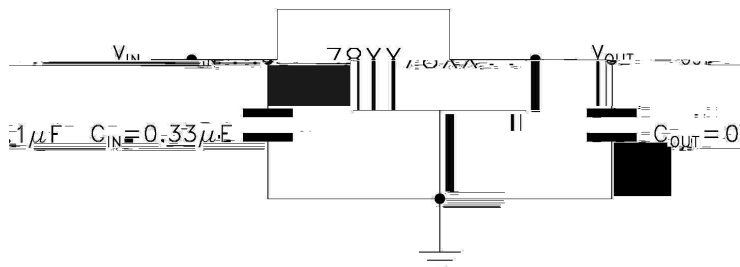
1.5A,

3-Terminal regulators ,output current up to 1.5A, internal thermal overload protection and short-circuit limiting, HF Product.

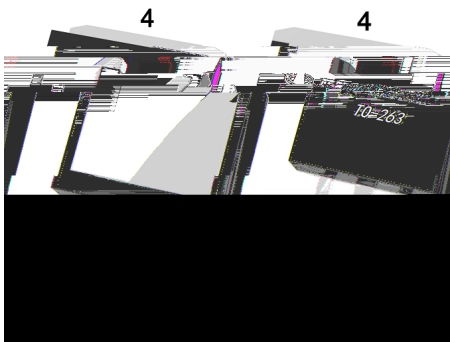
/ Applications

Voltage Regulator.

/ Equivalent Circuit or Application Circuit



/ Pinning



PIN1 IN PIN 2 4 GND PIN 3 OUT

/ Marking

See Marking Instructions.

/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating	Unit
Input voltage	V_i	35	V
Thermal Resistance Junction-ambient	$R_{\theta JA}$	62.5	/W
Thermal Resistance Junction-case	$R_{\theta JC}$	5.0	/W
Junction Temperature	T_J	150	
Operating Junction Temperature Range	T_{OPR}	-40 150	
Storage temperature range	T_{stg}	-65 150	

/ Electrical Characteristics(Ta=25 $V_i=10V, I_o=500mA$ unless otherwise specified)

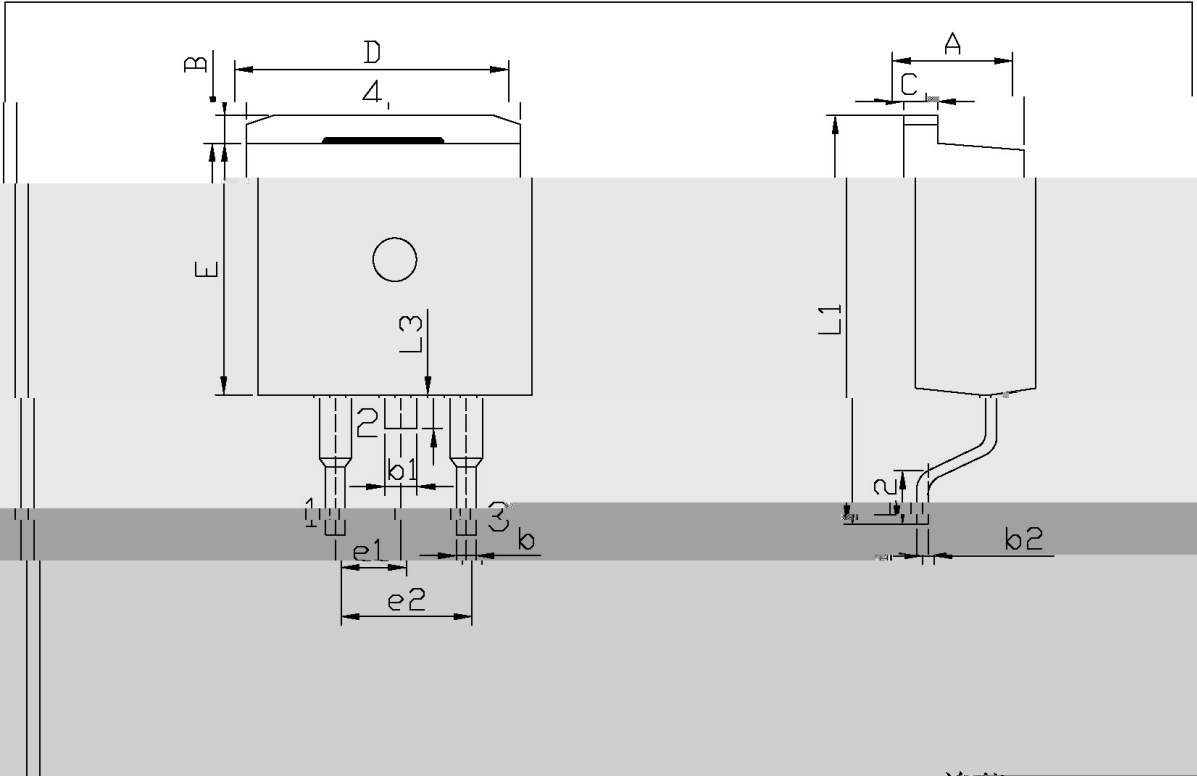
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Output Voltage	V_o	$T_j=25$	4.8	5.0	5.2	V
		$V_i=7V-20V$ $I_o=5mA-1A$ $P_o \leq 15W$	4.75	5.0	5.25	V
Load Regulation	V_{Load}	$T_j=25$ $I_o=5mA-1.5A$			100	mV
		$T_j=25$ $I_o=250mA-750mA$			50	mV
Line Regulation	V_{Line}	$T_j=25$ $V_i=7V-25V$		3.0	100	mV
		$T_j=25$ $V_i=8V-12V$		1.0	50	mV
Quiescent Current	I_q	$T_j=25$			8.0	mA
Quiescent Current Change	I_q	$V_i=7V-25V$			0.8	mA
		$I_o=5mA-1A$			0.5	mA
Output Voltage Drift	V_o / T	$I_o=5mA$		-1.1		mV/
Output Noise Voltage	eN	B=10Hz-100KHz $T_j=25$			40	$\mu V/V_o$
Supply Voltage Rejection	SVR	$V_i=8V-18V$ $f=120Hz$	62			dB
Dropout Voltage	V_d	$I_o=1A$ $T_j=25$		2.0		V
Output Resistance	R_o	$f=1KHz$		17		m Ω
Short Circuit Current	I_{sc}	$V_i=35V$ $T_j=25$		0.75		A
Short Circuit Peak Current	I_{scp}	$T_j=25$		2.2		A

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/ Electrical Characteristic Curve

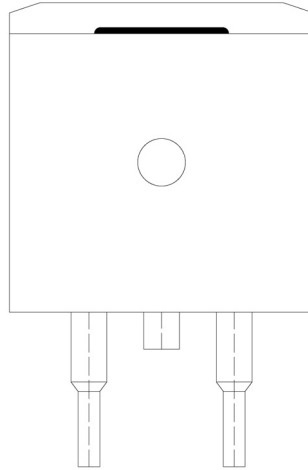
/ Package Dimensions



单位: mm

Symbol	Dimensions In Millimeters		Symbol	Dimensions In Millimeters	
	Min	Max		Min	Max
A	4.30	4.70	E	9.00	9.40
B	1.00	1.40	e1	2.54	2.74

/ Marking Instructions



BR

CW7805

Note:

BR: Company Code

CW7805: Product Type Code

() / Temperature Profile for IR Reflow Soldering(Pb-Free)

Note:

- | | | | | | |
|---|-----|-----|----|---------|---|
| 1 | 150 | 180 | 60 | 90sec; | 1.Preheating:150~180 , Time:60~90sec. |
| 2 | 245 | 5 | 5 | 0.5sec; | 2.Peak Temp.:245 5 , Duration:5 0.5sec. |
| 3 | | 2 | 10 | /sec. | 3. Cooling Speed: 2~10 /sec. |

/ Resistance to Soldering Heat Test Conditions

260 5 10 1 sec. Temp.:260±5 Time:10±1 sec

/ Packaging SPEC.

/ REEL

Package Type	Units					Dimension		(unit mm ³)
TO-263	800	1	800	6	4,800	13		