

**/ Descriptions**

TO-263  
Voltage Regulator in a TO-263 Plastic Package.

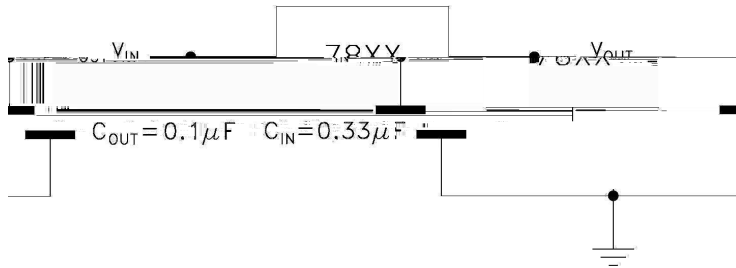
**/ Features**

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

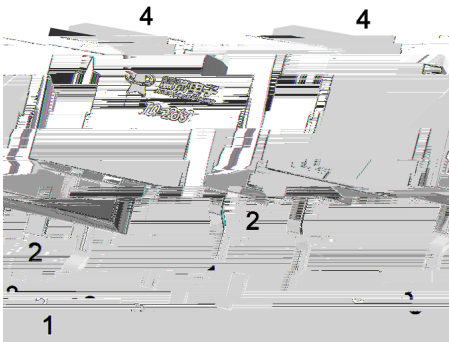
**/ Applications**

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 )**

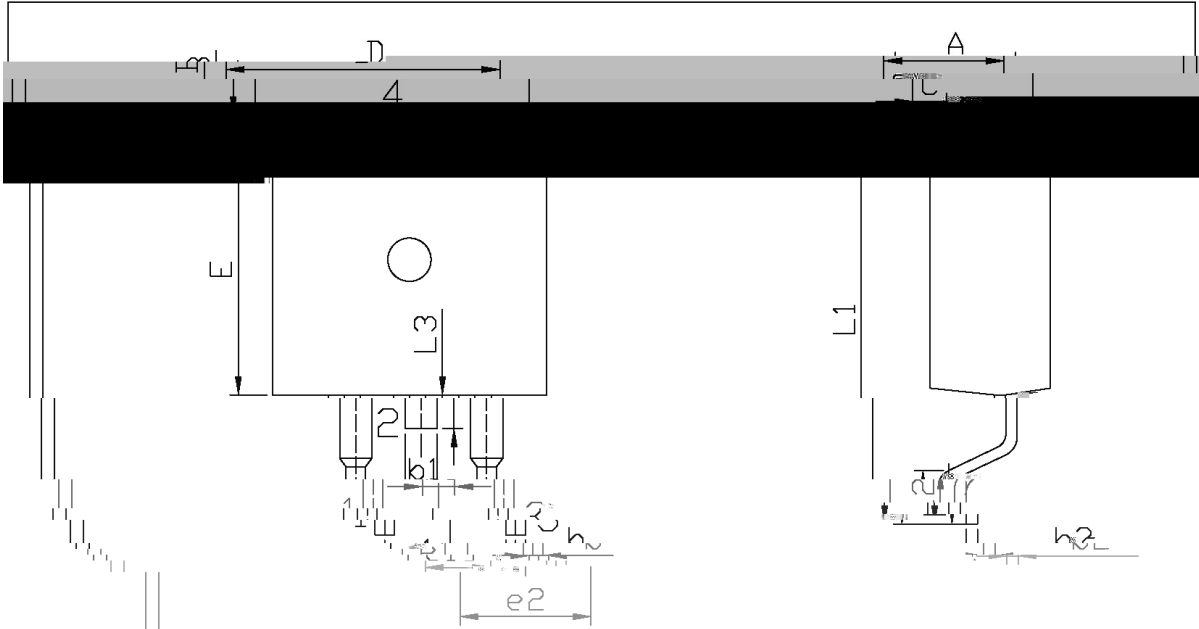
Parameter	Symbol	Rating	Unit
Input voltage	$V_i$	35	V
Thermal Resistance Junction-ambient	$R_{JA}$	62.5	/W
Thermal Resistance Junction-case	$R_{JC}$	5.0	/W
Junction Temperature	$T_J$	150	
Operating Junction Temperature Range	$T_{OPR}$	-40 150	
Storage temperature range	$T_{stg}$	-65 150	

**/ 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
		$V_i=7V-20V$ $I_o=5mA-1A$ $P_o$ 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	V/Vo
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
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

/ **Electrical Characteristic Curve**

/ Package Dimensions



单位: mm

Dimensions in Millimeters		Dimensions in Millimeters		Dimensions in Millimeters	
Symbol	Max	Symbol	Min	Symbol	Min
A	9.40	A	4.30	E	9.0
B	2.74	B	1.00	e1	2.2
C	5.00	C	0.90	e2	2.2
D	0.50	D	0.50	h1	0.50
E	9.0	E	9.0	h2	0.50
L1	4.70	L1	4.70	L2	4.70
L2	4.70	L2	4.70	L3	4.70
L3	4.70	L3	4.70	b1	2.54
b1	2.54	b1	2.54	b2	2.54
b2	2.54	b2	2.54	e1	2.2
e1	2.2	e1	2.2	e2	2.2
e2	2.2	e2	2.2	h1	0.50
h1	0.50	h1	0.50	h2	0.50
h2	0.50	h2	0.50		

**78B05**

( ) / 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.