

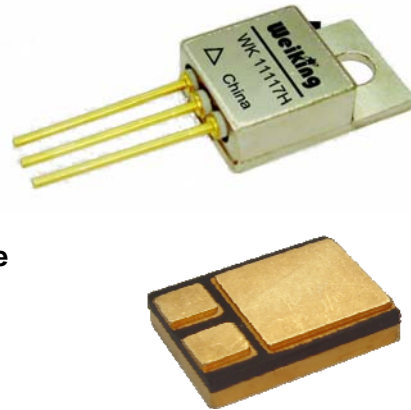


Weiking Electronics Manufacturing (Xi'an) Co.,Ltd

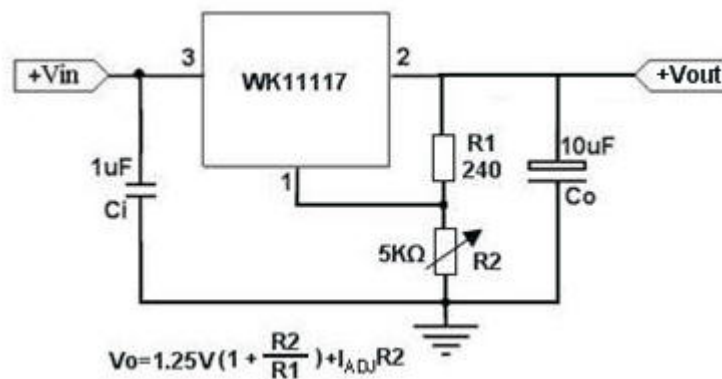
WK11117 3-Terminal Adjustable Positive Regulators

FEATURES:

- Adjustable output from 1.2V_{DC} ~ 37V_{DC}
- Guaranteed typical 0.3% load regulation
- Current limit constant with temperature
- Hermetically sealed package in TO-257 metal case
or in ceramic surface mounted case



TYPICAL APPLICATION DIAGRAMS:



AMBIENT TEMPERATURE:

Operating Temperature Range (T_c) : -55°C ~ +125°C (H)、-40°C ~ +85°C (E / I)

Storage Temperature Range (T_{stg}) : -65°C ~ 150°C

MAIN ELECTRICAL SPECIFICATIONS:

Output Current: 1A

Input-Output Voltage Differential: ≤40V

Power Dissipation: Internally Limited

THERMAL RESISTANCE (junction to case):

Symbol	S package	T/TD package	Unit
Rthj-c	3.5	5	°C/W

ELECTRICAL CHARACTERISTICS (H CLASS):

Product Model		WK11117			
Parameters	Test Conditions ¹⁾ ($P_D \leq 7.5W$)	MIN	TYP	MAX	Unit
Reference Voltage	$3V \leq (V_{in}-V_{out}) \leq 40V$ $10mA \leq I_{out} \leq 1A$	1.2	1.25	1.3	V
Line Regulation	$3V \leq (V_{in}-V_{out}) \leq 40V$ $T_c=25^\circ C$	-	0.01	0.02	%V
	$T_c=-55^\circ C \sim +125^\circ C$	-	0.02	0.05	
Load Regulation	$10mA \leq I_{out} \leq 1A$ $T_c=25^\circ C$	-	0.3	1	%
	$10mA \leq I_{out} \leq 0.5A$ $T_c=-55^\circ C \sim +125^\circ C$	-	0.3	1	
Thermal Regulation	20ms Pulse	-	0.03	0.07	%/W
Adjustment Pin Current		-	50	100	μA
Adjustment Pin Current Change	$3V \leq (V_{in}-V_{out}) \leq 40V$ $10mA \leq I_{out} \leq 1A$	-	0.2	5	μA
Minimum load Current	$(V_{in} - V_{out}) = 40V$	-	3.5	5	mA
Maximum load Current	$(V_{in} - V_{out}) \leq 15V$	-	0.8	-	A
	$(V_{in} - V_{out}) = 40V$	-	0.2	-	
Ripple Rejection Ratio	$V_{out} = 10V, f = 120Hz,$ $C_{adj}=0\mu F$	-	65	-	dB
	$V_{out} = 10V, f = 120Hz, C_{adj} =$ $10\mu F$	66	80	-	

Notes:

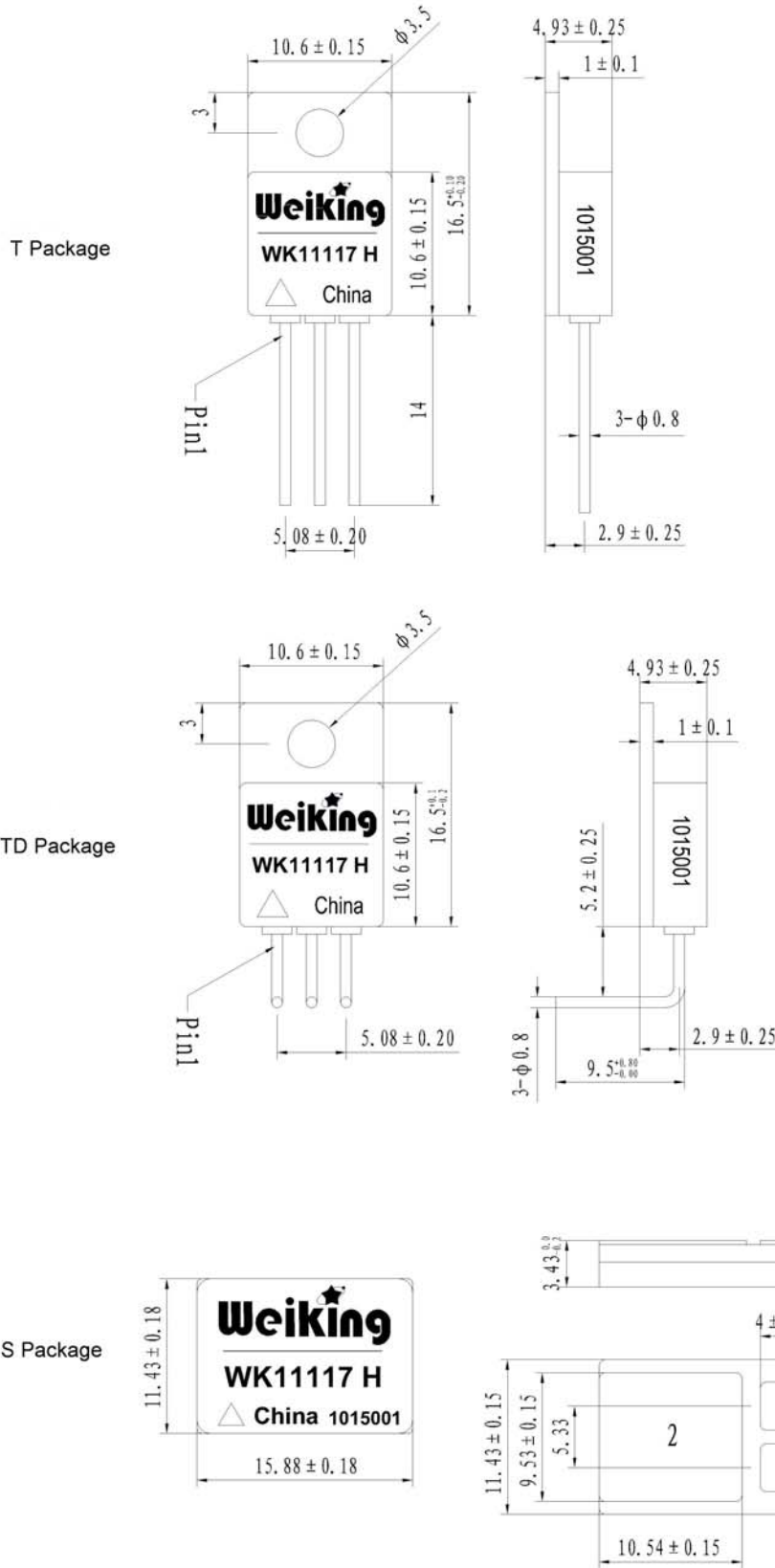
- 1) $T_c=-55^\circ C \sim +125^\circ C$, $V_{in}-V_{out}=5V$, $I_{out}=10mA$ unless otherwise specified.
- 2) class E and I device' s parameters have the same values as class H over full operating temperature range.

ENVIRONMENTAL SCREENING:

Num	Test	MIL-Std-883 Standard and methods	Test conditions	H	E	I	
1	Internal visual	2017	—	100%	100%	100%	
2	Seal	1014	Fine leak: A1 Gross leak: C1	100%	100%	100%	
3	Temperature cycling	1010	-65°C~+150°C ten times	100%	—	—	
		—	-55°C~+125°C ten times	—	100%	—	
4	Constant acceleration	2001	Y1 orientation, 1min 3000g	100%	100%	—	
5	Interim Electrical test	—	25°C	100%	100%	100%	
6	Burn-in	1015	125°C, 160h	100%	—	—	
			85°C, 96h	—	100%	—	
			85°C, 48h	—	—	100%	
7	Final electrical test	—	Normal temperature	25°C	100%	100%	100%
			Maximum rated	125°C	100%	—	—
			Minimum rated	85°C	—	100%	—
			-55°C	100%	—	—	
			-40°C	—	100%	—	
8	Seal	1014	Fine seal: A1 Gross seal: C1	100%	100%	—	
9	External visual	2009	—	100%	100%	100%	

MECHANICAL SPECIFICATIONS AND PIN-OUT INFORMATION:

Mechanical Specifications in mm:



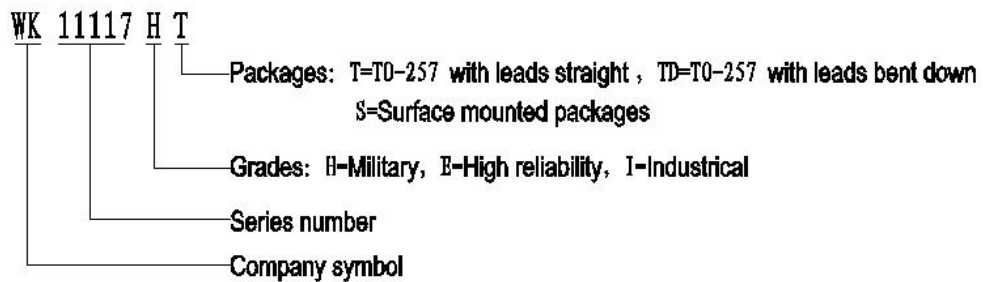
Pin-Out Information:

WK11117		
Pin number	Symbol	Definition
1	Adj	Adjustment
2	+Vo	Positive Output
3	+Vin	Positive Input

Note: 1. when assembling, it' s suggested to install fixed screws prior to soldering module pins , which' s prone to enhance pins overstressed and thus cause the glass insulators cracked and module leaked.

2. T and TD package' cases are also output.

ORDERING INFORMATION:



Mark specification:

Serial Number: 1015 001,for example, indicates the product manufactured in the 15th week of 2010 and the sequence number is 001.