

# HW Series Wide Range Input Regulated Single/Dual Output 2.0W~3.0W



- DIL 24pin Package 4.5~9.0V 9.0~18.0V or 18.0~24.0V Wide Range Input
- Output Power Rate From 2.0W To 3.0W Available
- No Heat Sink Required
- Internal SMD Construction
- No External Components Required
- Hi-Isolation 3KVdc Available

## Selection Guide

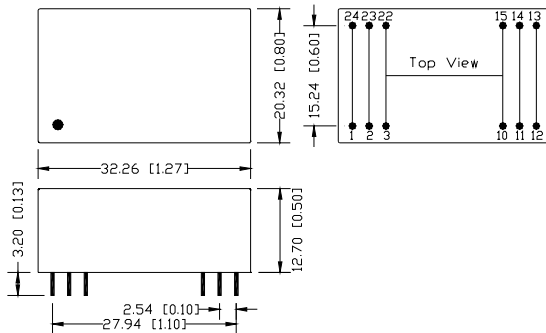
Input Voltage Vdc	Output Voltage Vdc	Output Current (mA)		Ripple Noise mV	Series Number Selector Guide	Remarks
		2.0W	3.0W			
4.5~9.0V (5.0V)	5.00	200.00	600.00	50.00	<b>HWD-24050-3L</b> H : Case Type W : Wide Range Input D : Dual Output 24 : Input Voltage (18V~36V) 05 : Output Voltage 0 : Revision Code (0..9..A..Z) 3 : Output Power Rate (W) L : Leadfree Process	Customer And Special Design On Request
	12.00	83.30	250.00	80.00		
9.0~18.0V (12.0V)	15.00	66.60	200.00	80.00		
	±5.00	±100.00	±300.00	±50.00		
18.0~36.0V (24.0V)	±12.00	±41.60	±125.00	±50.00		
	±15.00	±33.30	±100.00	±80.00		

**Specifications** All Specification Are Typical Nominal Line, Full Load And 25°C Unless Otherwise Notes.

General Characteristics					
Parameter	Conditions	Min.	Typ.	Max.	Units
Isolation Voltage	60 Seconds	-----	-----	1000	VDC
Isolation Resistance	500VDC	1000	-----	-----	Mohm
Isolation Capacitance	100MHz,1V	-----	60	100	pF
Switching Frequency		80	150	250	KHz
MTBF MIL-HDBK-217F @25°C		0.8	-----	-----	MHrs
Absolute Maximum Ratings					
Parameter		Min.	Max.	Units	
Input Surge Voltage (1000ms)	5VDC Input Models	-0.7	16.0	VDC	
	12VDC Input Models	-0.7	25.0	VDC	
	24VDC Input Models	-0.7	40.0	VDC	
Wave Reflow Soldering Temperature		10 Sec. 265°C Max.			

Environmental Characteristics					
Parameter	Conditions	Min.	Max.	Units	
Operating Temperature	Ambient	-40	+71	°C	
Storage Temperature		-40	+125	°C	
Humidity		-----	95	%	
Cooling	Free-Air Convection				
Output Characteristics					
Parameter	Conditions	Min.	Typ.	Max.	Units
Line Regulation	For 1% Of Vin	-----	-----	±0.5	%
Load Regulation	20% To 100%	-----	-----	±0.5	%
Out put Volt Balance	Dual Out only	-----	±1.0	±1.2	%
Out put Volt Accuracy		-----	-----	±3.0	%
Short Circuit	Continuous Auto recovery				

## Dimensions And Pinout ( Unit : mm[inch]±0.15mm )



Pin Connection		
Pin	Single Out	Dual Out
1,24	+Input Voltage	+Input Voltage
12,13	-Input Voltage	-Input Voltage
11,14	+Output Voltage	+Output Voltage
3,22	Omitted	Common
11,15	-Output Voltage	Common
2,23	Omitted	-Output Voltage

