

"A" Type



Size: 4.57 x 1.87 x 1.30 inches

"B" Type



Size: 4.57 x 1.87 x 1.30 inches

"C" Type



Size: 4.57 x 1.87 x 1.30 inches

**FEATURES**

- RoHS Compliant
- 25.5~34 Watts Output Power
- Dual Outputs
- Free Air Convection Cooling
- MTBF: 50,000 Hours
- Very Low Standby Power
- CEC / Energy Star Level V Compliant
- 100-240VAC Input Voltage Range
- Output Voltage, Over Current, & Short Circuit Protection
- IEC-320-C14, IEC-320-C8, & IEC-320-C6 AC Inlets Available
- Several Output Connector Options Available
- UL/cUL, FCC, CE, GS, SAA, C-Tick, CB, & CCC Approvals

**DESCRIPTION**

The D TSAWD series of AC/DC desktop power supplies provides up to 34 Watts of output power in a 4.57" x 1.87" x 1.30" package. This series consists of dual output models with a 100~240VAC input voltage range. These supplies are RoHS compliant and are protected against over voltage, over current, and short circuit conditions. The D TSAWD series is CEC and Energy Star Level V compliant and has UL/cUL, FCC, CE, GS, SAA, C-Tick, CB, and CCC safety approvals. IEC-320-C14, IEC-320-C8, and IEC-320-C6 AC inlet types are available for this series.

**MODEL SELECTION TABLE**

Model Number	Input Voltage Range	Output Voltage	Output Current	Ripple & Noise <sup>(1)</sup>	Output Power	AC Inlet	
D TSAWD25-5/12A	100 ~ 240 VAC	5 VDC	1.5A	50mVp-p	25.5W	IEC-320-C14	
		12 VDC	1.5A	100mVp-p			
D TSAWD34-5/12A	100 ~ 240 VAC	5 VDC	2A	50mVp-p	34W		
		12 VDC	2A	100mVp-p			
D TSAWD25-5/12B	100 ~ 240 VAC	5 VDC	1.5A	50mVp-p	25.5W		IEC-320-C8
		12 VDC	1.5A	100mVp-p			
D TSAWD34-5/12B	100 ~ 240 VAC	5 VDC	2A	50mVp-p	34W		
		12 VDC	2A	100mVp-p			
D TSAWD25-5/12C	100 ~ 240 VAC	5 VDC	1.5A	50mVp-p	25.5W	IEC-320-C6	
		12 VDC	1.5A	100mVp-p			
D TSAWD34-5/12C	100 ~ 240 VAC	5 VDC	2A	50mVp-p	34W		
		12 VDC	2A	100mVp-p			

- NOTES**
1. Ripple and noise is measured at 20MHz limited bandwidth with 0.1µF ceramic and 10µF electrolytic capacitors across the output.
  2. Several output connector options available. Please call factory for ordering details.

**MODEL NUMBER SETUP**

D TSAW	D	34	-	5/12	A
Series Name	Number of Outputs	Output Power		Output Voltage	AC Inlet Connector
	<b>D:</b> Dual Output	<b>25:</b> 25.5 Watts <b>34:</b> 34 Watts		<b>5/12:</b> 5 VDC, 12 VDC	<b>A:</b> IEC-320-C14 <b>B:</b> IEC-320-C8 <b>C:</b> IEC-320-C6

Note: Several output connector options are available. Please contact factory for ordering details.

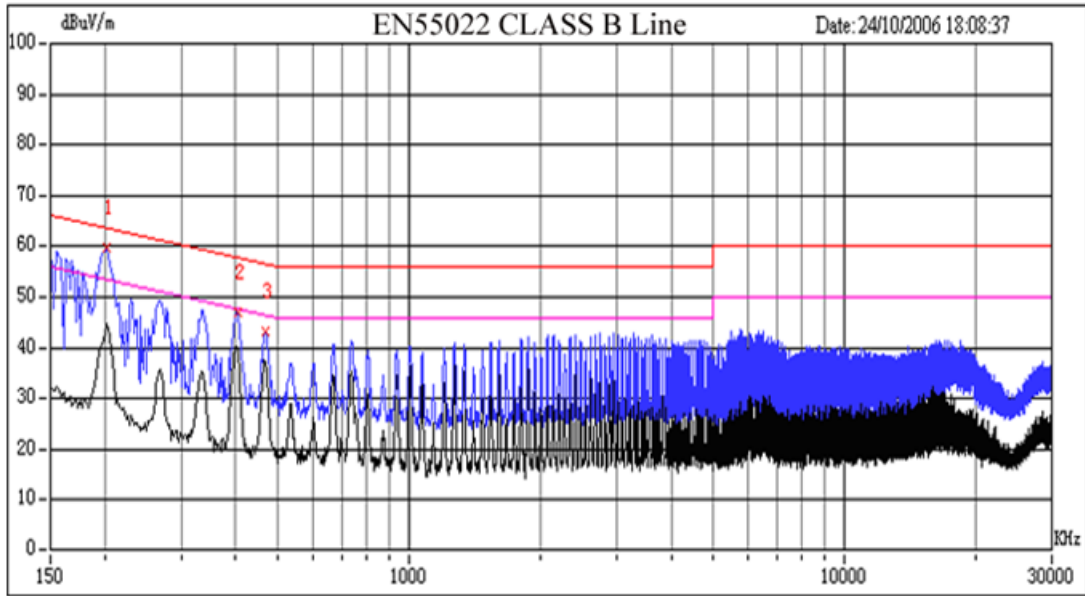
**SPECIFICATIONS: D TSAWD SERIES**

All specifications are based on 25°C, Nominal Input Voltage, and Maximum Output Current unless otherwise noted.  
 We reserve the right to change specifications based on technological advances.

SPECIFICATION	TEST CONDITIONS	Min	Typ	Max	Unit
<b>INPUT SPECIFICATIONS</b>					
Input Voltage	Rated input voltage range	100	115/230	240	VAC
	Full Range	90	115/230	264	
Input Frequency		47	50/60	63	Hz
Input Current	90VAC/60Hz and full load			1.5	A
Inrush Current	100VAC/50Hz, full load, cold start			30	A
	240VAC/50Hz, full load, cold start			75	
Stand-by Power	90VAC/63Hz ~ 264VAC/47Hz and no load			2.5	W
<b>OUTPUT SPECIFICATIONS</b>					
Output Voltage		See Table			
Voltage Tolerance		-5		+5	%
Line Regulation		-1		+1	%
Load Regulation		-5		+5	%
Output Power		See Table			
Output Current		See Table			
Minimum Load		0			mA
Ripple & Noise		See Table			
Hold-Up Time	100VAC/60Hz and full load	10			ms
Turn-on Time	100VAC/60Hz and full load			5	s
<b>PROTECTION</b>					
Over Voltage Protection		Output voltage clamped by Zener diode			
Over Current Protection		Output shut-down; Automatic recovery			
Short Circuit Protection		Output shut-down; Automatic recovery			
<b>GENERAL SPECIFICATIONS</b>					
Efficiency	90VAC/60Hz and full load	78			%
Switching Frequency			70		KHz
Dielectric Withstand Voltage (I/P to O/P)	10mA / 3 sec	3000			VAC
Insulation Resistance (I/P to O/P)	500VDC	10			MΩ
<b>ENVIRONMENTAL SPECIFICATIONS</b>					
Operating Temperature		0		+35	°C
Storage Temperature		-40		+85	°C
Operating Humidity		20		90	% RH
Storage Humidity		0		90	% RH
Cooling		Free air convection			
MTBF	@ 25°C (MIL-HDBK-217F)	50,000 hours			
<b>PHYSICAL SPECIFICATIONS</b>					
Dimensions (L x W x H)		4.57 x 1.87 x 1.30 inches (116.0 x 47.5 x 33.0 mm)			
Weight		Approximately 7.41 oz (210g)			
AC Inlet	"A" Suffix	IEC-320-C14			
	"B" Suffix	IEC-320-C8			
	"C" Suffix	IEC-320-C6			
Output Connector		Optional output connectors available			
<b>SAFETY &amp; COMPLIANCE</b>					
Safety Approvals		UL/cUL, FCC, CE, GS, PSE, SAA, C-Tick, CB, EUP, and CCC			
Compliance		RoHS and CEC/Energy Star Level V compliant			

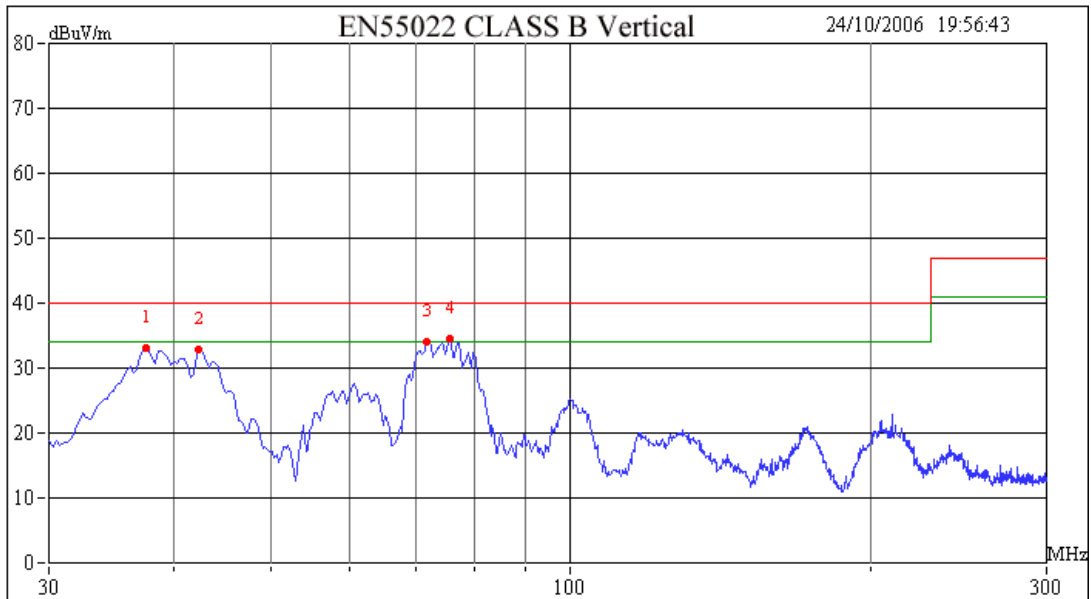
EMI & RADIATION CHARACTERISTICS

Conduction



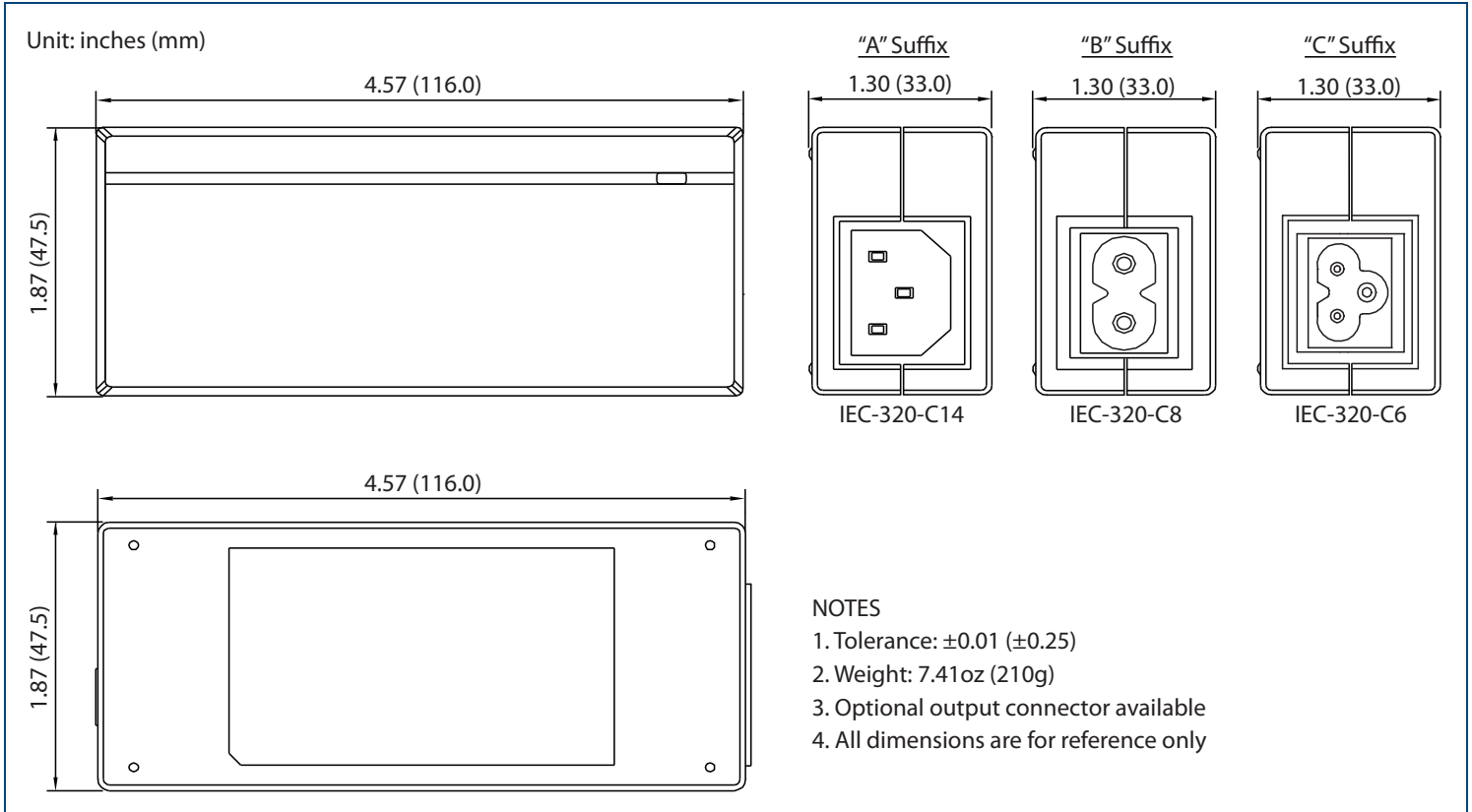
	Freq (KHz)	Peak Amptd (dBuV)	QP Amptd (dBuV)	Avg Amptd (dBuV)	QP Limit (dBuV)	Avg Limit (dBuV)	QP Margin (dB)	Avg Margin (dB)	Factor (dB)
1	201.8000	59.92		42.73	64.52	54.52	-4.60	-11.79	13.66
2	403.4500	46.87		40.27	58.76	48.76	-11.89	-8.49	12.22
3	470.0500	43.28			56.86	46.86	-13.57	-3.57	12.07

Radiation



	Freq (MHz)	Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Reading (dBuV)	Factor (dB)	Remarks
1	37.5600	33.00	-7.00	40.00	21.83	11.17	
2	42.4200	32.89	-7.11	40.00	21.72	11.17	
3	71.8500	34.04	-5.96	40.00	25.02	9.02	
4	75.6300	34.54	-5.46	40.00	22.80	11.74	

**MECHANICAL DRAWING**



**COMPANY INFORMATION**

Wall Industries, Inc. has created custom and modified units for over 50 years. Our in-house research and development engineers will provide a solution that exceeds your performance requirements on-time and on budget. Our ISO9001-2008 certification is just one example of our commitment to producing a high quality, well-documented product for our customers.

Our past projects demonstrate our commitment to you, our customer. Wall Industries, Inc. has a reputation for working closely with its customers to ensure each solution meets or exceeds form, fit and function requirements. We will continue to provide ongoing support for your project above and beyond the design and production phases. Give us a call today to discuss your future projects.

Contact **Wall Industries** for further information:

Phone: ☎ (603)778-2300  
 Toll Free: ☎ (888)597-9255  
 Fax: ☎ (603)778-9797  
 E-mail: [sales@wallindustries.com](mailto:sales@wallindustries.com)  
 Web: [www.wallindustries.com](http://www.wallindustries.com)  
 Address: 5 Watson Brook Rd.  
 Exeter, NH 03833