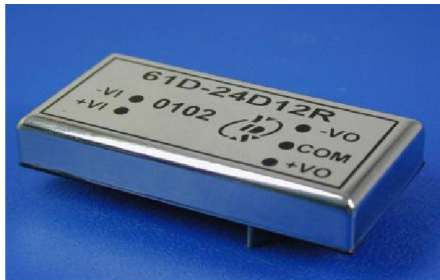




Wide Input Voltage Range 10 Watt Dc-Dc Converter



FEATURES:

- 2:1 Wide Input Voltage.
- Recognized By UL 60950-1
- 10 Watt Package.
- Efficiency To 80%
- PI Input Filter.
- MTBF:>1,500,000 hrs
- 1500Vdc Isolation
- Operating Temperature:-40°C TO +100°C



Specifications typical at TA=25°C, nominal input voltage and rated output current unless otherwise specified

Part Number	Input Voltage	Input Current		Output Voltage	Output Current	Efficiency	Capacitor Load
	Vdc	No-Load (mA TYP)	Full Load (mA TYP)	Vdc	Full Load(mA)	%TYP	uF TYP
61D-12S03RNL	9-18	30	705	3.3	2000	78	2200
61D-12S05RNL	9-18	30	1016	5	2000	82	2200
61D-12S09RNL	9-18	30	1004	9	1111	83	1000
61D-12S12RNL	9-18	30	992	12	833	84	680
61D-12S15RNL	9-18	30	992	15	666	84	470
61D-12S18RNL	9-18	30	980	18	555	85	470
61D-12S24RNL	9-18	30	980	24	416	85	330
61D-12D05RNL	9-18	30	1016	±5	±1000	82	±1000
61D-12D09RNL	9-18	30	992	±9	±555	84	±470
61D-12D12RNL	9-18	30	992	±12	±416	84	±470
61D-12D15RNL	9-18	30	980	±15	±333	85	±330
61D-12D18RNL	9-18	30	980	±18	±277	85	±220
61D-12D24RNL	9-18	30	980	±24	±208	85	±220
61D-24S03RNL	18-36	25	352	3.3	2000	78	2200
61D-24S05RNL	18-36	25	508	5	2000	82	2200
61D-24S09RNL	18-36	25	496	9	1111	84	1000
61D-24S12RNL	18-36	25	496	12	833	84	680
61D-24S15RNL	18-36	25	490	15	666	85	470
61D-24S18RNL	18-36	25	490	18	555	85	470
61D-24S24RNL	18-36	25	484	24	416	86	330
61D-24D05RNL	18-36	25	508	±5	±1000	82	±1000
61D-24D09RNL	18-36	25	502	±9	±555	83	±470
61D-24D12RNL	18-36	25	496	±12	±416	84	±470
61D-24D15RNL	18-36	25	496	±15	±333	84	±330
61D-24D18RNL	18-36	25	490	±18	±277	85	±220
61D-24D24RNL	18-36	25	490	±24	±208	85	±220
61D-48S03RNL	36-72	20	176	3.3	2000	78	2200
61D-48S05RNL	36-72	20	251	5	2000	83	2200
61D-48S09RNL	36-72	20	248	9	1111	84	1000
61D-48S12RNL	36-72	20	248	12	833	84	680
61D-48S15RNL	36-72	20	248	15	666	84	470
61D-48S18RNL	36-72	20	245	18	555	85	470
61D-48S24RNL	36-72	20	245	24	416	86	330
61D-48D05RNL	36-72	20	254	±5	±1000	82	±1000
61D-48D09RNL	36-72	20	248	±9	±555	84	±470
61D-48D12RNL	36-72	20	245	±12	±416	85	±470
61D-48D15RNL	36-72	20	245	±15	±333	85	±330
61D-48D18RNL	36-72	20	242	±18	±277	86	±220
61D-48D24RNL	36-72	20	242	±24	±208	86	±220



Wide Input Voltage Range 10 Watt Dc-Dc Converter

Input Specifications

Parameters	Conditions	Min	Typ	Max	Units
Voltage Types				2:1	
Filter	Pi TYPE				

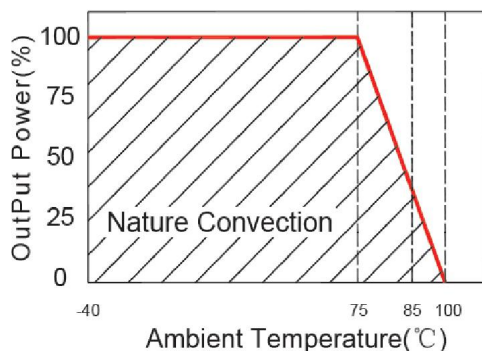
Output Specifications

Parameters	Conditions	Min	Typ	Max	Units
Voltage Tolerance	Full load@Vin(nom.)			±2	%
Short Circuit Protection	Hiccup, automatic recovery				
Line Regulation				±0.5	%
Load Regulation	SINGLE(25% to 100%)			±0.5	%
Load Regulation	Dual(25% to 100%, Balance Load)			±2.0	%
Cross Regulation	DUAL(25% to 100%)			±5.0	%
Ripple & Noise	BW=DC To 20MHz			100	mVp-p
Transient response setting time	50% load step change		350		us

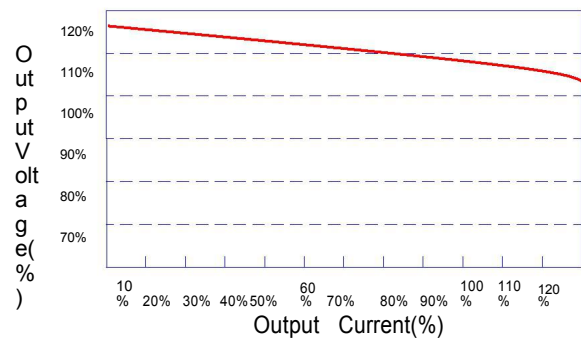
General Specifications

Parameters	Conditions	Min	Typ	Max	Units
Isolation Resistance	500Vdc	1000			MΩ
Switching Frequency			300		KHz
Operating Temperature	With derating	-40		100	°C
Humidity	Non Condensing			95	%
Cooling	Free air Convection				
Case material	Nickel Coated With Non-Conductive Base				
Weight			36.5		g
Dimensions			50.8x25.4x10.6		mm
Potting Material			Epoxy (UL94V-0 rated)		

Temperature Derating Graph



Tolerance Envelope Graph



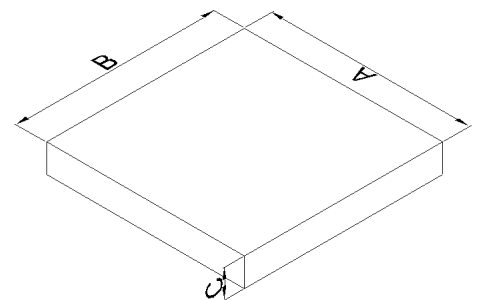
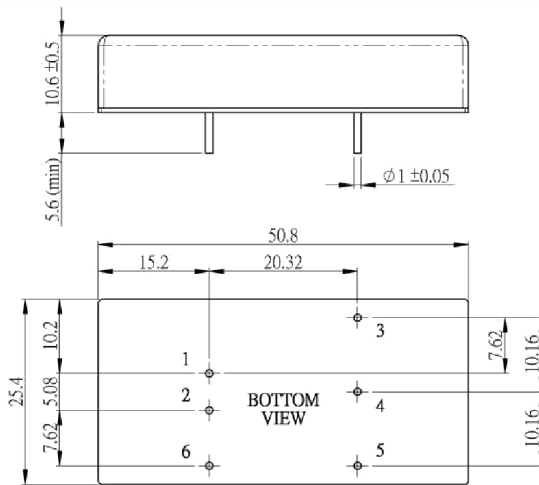


Wide Input Voltage Range 10 Watt Dc-Dc Converter

Recommended Test Circuit	Part Number
	<p>61D - 12 S 05 R NL A B C D E F</p> <p>A:Series B:Input Voltage C:Single(S)Dual(D) D:Output Voltage E:Regulated(R) F:RoHS Version</p>

Suggest adding input external filter(C1,C2,L)to meet conducted emissions(EN55022 class A)

Markings and dimensions	Packaging
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Size(mm)		
A	B	C
210.00	210.00	30.00

Unit : mm
 Tolerance : XX.X ± 0.5 , XX.XX ± 0.25

PIN Assignment						
PIN	1	2	3	4	5	6
SINGLE	+Vin	-Vin	+Vout	NO PIN	-Vout	NO PIN
DUAL	+Vin	-Vin	+Vout	COM	-Vout	NO PIN