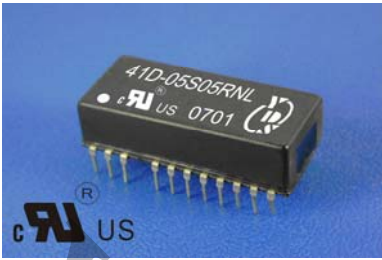




2000Vrms Isolation Single & Dual Output 1.8 Watt Dc-Dc Converter



FEATURES:

- 24PIN DIP PACKAGE
- High Efficiency up to 85%
- Recognized By UL 60950-1
- Unregulated & Regulated Output Types
- Low Ripple & Noise
- Internal SMD Construction
- Industry Standard Pinout
- Operating Temperature:-40°C TO +85°C
- No External Component Required



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

Part Number	Output Voltage	Output Current	Efficiency
	Vdc	mA	%TYP
41D-XXS05RNL	5	360	58
41D-XXS05NNL	5	360	70
41D-XXD05NNL	±5	±180	70
41D-XXS09RNL	9	200	60
41D-XXS09NNL	9	200	70
41D-XXD09NNL	±9	±100	70
41D-XXS12RNL	12	150	60
41D-XXS12NNL	12	150	75
41D-XXD12RNL	±12	±75	60
41D-XXD12NNL	±12	±75	75
41D-XXS15RNL	15	120	60
41D-XXS15NNL	15	120	75
41D-XXD15RNL	±15	±60	60
41D-XXD15NNL	±15	±60	75
41D-XXS24RNL	24	75	60
41D-XXS24NNL	24	75	80
41D-XXD24RNL	±24	±38	60
41D-XXD24NNL	±24	±38	80

Note:1."XX" Is Input Voltage :05=5Vdc,09=9Vdc,12=12Vdc,15=15Vdc,24=24Vdc.
 2.The input voltage increases, there will be an increase in efficiency.

Input Specifications

Parameters	Conditions	Min	Typ	Max	Units
Voltage Tolerance	Vo,Io Nom			±10	%
Filter	Capacitor				

Output Specifications

Parameters	Conditions	Min	Typ	Max	Units
Voltage Tolerance	100% full load			±5	%
Short Circuit Protection	Regulated(Continuous)				
Short Circuit Protection	Unregulated(Short Trem)			1Sec	
Line Regulation	REGULATED			±0.3	%
Load Regulation	REGULATED			±0.5	%
Ripple & Noise	BW=DC To 20MHz			50	mVp-p
Line Regulation	Unregulated (For 1% of Vin)		1.2		%
Load Regulation	Unregulated (20% To 100% F.L)			10	%

General Specifications

Parameters	Conditions	Min	Typ	Max	Units
Isolation Resistance	500Vdc	1000			MΩ
Switching Frequency	Full load,nominal input		50		KHz
Operating Temperature		-40		85	°C
Humidity	Non Condensing			95	%
Cooling	Free air Convection				
Case material	DAP				
MTBF	MIL-HDBK-217F@25°C	2500000			Hours
MTBF	MIL-HDBK-217F@25°C(Regulated)	1500000			Hours
Weight			9.0		g
Dimensions			33.02X14.73X10.41		mm



Temperature Derating Graph

Recommended Test Circuit

5V :Cin 4.7uF,25V 5V :Cout 4.7uF,25V
 9V :Cin 4.7uF,25V 9V :Cout 2.2uF,25V
 12V:Cin 2.2uF,25V 12V:Cout 1uF,25V
 15V:Cin 2.2uF,25V 15V:Cout 0.47uF,50V
 24V:Cin 1uF,50V 24V:Cout 0.47uF,50V

5V :Cin 4.7uF,25V 5V :Cout 4.7uF,25V
 9V :Cin 4.7uF,25V 9V :Cout 2.2uF,25V
 12V:Cin 2.2uF,25V 12V:Cout 1uF,25V
 15V:Cin 2.2uF,25V 15V:Cout 0.47uF,50V
 24V:Cin 1uF,50V 24V:Cout 0.47uF,50V

Tolerance Envelope Graph

UNREGULATED

Part Number

41D - 05 S 05 R NL
 A B C D E F

A:Series
 B:Input Voltage
 C:Single(S)Dual(D)
 D:Output Voltage
 E:Regulated(R)Unregulated(N)
 F:RoHS Version

Markings and dimensions

24 13 14.73 16.65 33.02MAX 1 12 2.54 MIN 0.5±0.05 27.94 2.54±0.10 0.25±0.05 0.41 10.41

Packaging

Size(mm)		
A	B	C
13.23	12.30	530

Unit:mm Unless otherwise specified,all tolerances are ±0.25

PIN Connection

PIN	1,2	9,10	11,12	13,14	15,16	23,24	Other
SINGLE	+Vin	-Vout	+Vout	NC	NC	-Vin	NC
DUAL	+Vin	COM	+Vout	COM	-Vout	-Vin	NC