



**DESCRIPTION:** 40-50W 1.5KVDC isolated Wide Input Voltage DC/DC Converters

The rated output power of TP40DC/TP50DC converters is 40W,50W, 2:1 ,4:1 input voltage range,the voltage range is 18V-36V,36V-75V, 9V-36V、 18V-75V.The accuracy of the converter can reach ±1%,it can be widely used in telecommunications,railway transportation, Auto industrial, instrument and etc.

## FEATURES

40-50W output power	Long-term short circuit protection, Automatic recovery	High power density, high conversion efficiency
Miniaturized package	With remote control and output adjustment function	RoHS compliant

## MODEL SELECTION

Part Number	Input		Output		Capacity (uF)	Efficiency(Typ) %
	Voltage (VDC)		Voltage (VDC)	Current (A)		
	Rated	Range				
TP40DC24S03	24(2:1)	18-36	3.3	8	10000	85
TP40DC24S05	24(2:1)	18-36	5.05	8	4700	88
TP40DC24S12	24(2:1)	18-36	12	3.33	1000	89
TP40DC24S15	24(2:1)	18-36	15	2.67	1000	89
TP40DC48S03	48(2:1)	36-75	3.3	8	10000	85
TP40DC48S05	48(2:1)	36-75	5.05	8	4700	88
TP40DC48S12	48(2:1)	36-75	12	3.33	1000	89
TP40DC48S15	48(2:1)	36-75	15	2.67	1000	89
TP40DC24S05W	24(4:1)	9-36	5.05	8	4700	88
TP40DC24S12W	24(4:1)	9-36	12	3.33	1000	88
TP40DC24S15W	24(4:1)	9-36	15	2.67	1000	88
TP40DC48S05W	48(4:1)	18-75	5.05	8	4700	88
TP40DC48S12W	48(4:1)	18-75	12	3.33	1000	88
TP40DC48S15W	48(4:1)	18-75	15	2.67	1000	89
TP50DC24S05	24(2:1)	18-36	5.05	10	10000	88
TP50DC24S12	24(2:1)	18-36	12	4.17	1000	89
TP50DC48S05	48(2:1)	36-75	5.05	10	10000	88
TP50DC48S12	48(2:1)	36-75	12	4.17	1000	89
TP50DC24S05W	24(4:1)	9-36	5.05	10	10000	88
TP50DC24S12W	24(4:1)	9-36	12	4.17	1000	89
TP50DC48S05W	48(4:1)	18-75	5.05	10	10000	88
TP50DC48S12W	48(4:1)	18-75	12	4.17	1000	89

Input voltage 9-18VDC ,start-up voltage 9.5-18VDC , input voltage 9-36VDC ,start-up voltage 9.5-36VDC.

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

## INPUT CHARACTERISTICS

parameter	conditions	Min	Typ	Max	Units
Input Voltage	24V Input module(18V-36V)	18	24	36	VDC
Input Voltage	48V Input module(36V-75V)	36	48	75	VDC
Input Voltage	24V Input module(9V-36V)	9.5	24	36	VDC
Input Voltage	48V Input module(18V-75V)	18	48	75	VDC
Remote control	CNT pin is floating or connect to TTL high level		Opened		VDC
Remote control	CNTconnect to -Vin		Closed		

## OUTPUT CHARACTERISTICS

parameter	conditions	Min	Typ	Max	Units
Output voltage accuracy				±1	%
Voltage regulation	V01			±10	%
Line regulation	V01			±0.2	%
Load regulation	V01			±0.5	%
Dynamic Response		+/-4%Vo /400us			
Ripple and noise	V0≤5VDC			50	mvp-p
Ripple and noise	other			100	mvp-p
Ripple and noise	V0≥48VDC			200	mvp-p
Temperature drift coefficient			±0.02		%/°C

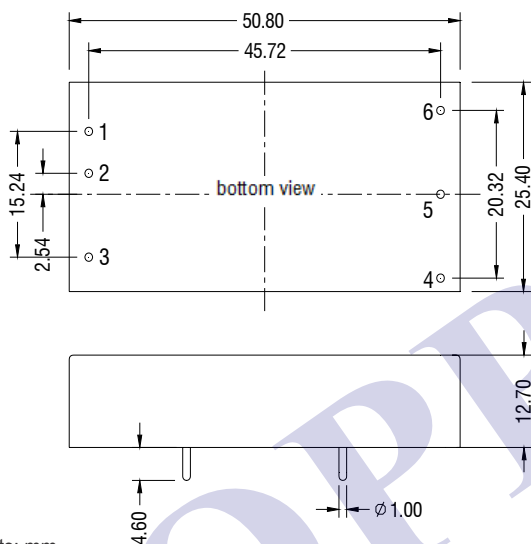
**TEMPERATURE CHARACTERISTICS**

parameter	conditions	Min	Typ	Max	Units
Isolated voltage	Input-Output			1500	VDC
Isolated voltage	Input-case			1500	VDC
Isolated voltage	Output-case			500	VDC
Switch frequency			330		KHZ
Mean time between failures	Mil HDBK 217F Tc=25℃		2×10 <sup>6</sup>		
case temperature		-40		+95	℃
Storage temperature		-55		+125	℃
Relative humidity		10		90	%
short circuit protection		Long-term short circuit protection, Automatic recovery			

- Module in every environment temperature rating, case temperature under shall not

**MECHANICAL DIMENSIONS**

DIP Package



Units: mm  
 Pin diameter tolerances: ±0.1mm  
 General Tolerance: ±0.5mm

**PIN CONNECTION**

PIN	Single
1	+Vin
2	-Vin
3	CNT
4	TRIM
5	GND
6	+V0

**MODEL SELECTION**

