

D10

MAX. Power 10W Isolated DC-DC Converter

D10 Series Encapsulated PCB Type DC-DC Converter



Features

- Encapsulated Compact Size
- High Efficiency
- Isolated Input - Output
- 300kHz fixed frequency and Current mode Control
- Low output Ripple & Noise
- Built-in over current protection circuit
- Wide 2 :1 input range
- Safety : Meets UL/CE Standard (Approvals pending)
- RoHS compatible design
- 3-years warranty

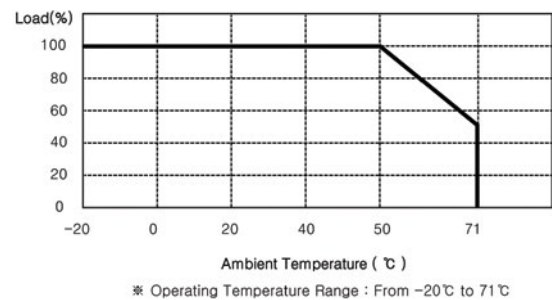
Environment

- Operating Temperature : -20°C ~ 71°C
- Operating Humidity : 20% ~ 90% RH (Non condensing)
- Storage Temperature : -40°C ~ 105°C
- Cooling : Free-Air Convection
- MTBF : 6.0 x 10⁵ hrs

Applications

- Data and telecommunication
- Datacommunication electronic equipments
- FA control

Derating Curve



General Specifications

Input	Input Voltage Range	5V(4.5~7.2), 12V(8~16.5), 24V(18~32), 48V(32~63)
	Efficiency	77% ~ 85%
Output	Output Voltage	3.3V, 5V, 9V, 12V, 15V, 24V, ±5V, ±12V, ±15V
	Line Regulation	± 0.5%
	Load Regulation	± 1.0%
	Output Voltage Accuracy	± 2.0%
	Output Voltage adj. Range	None
Protection Circuit	Over Current Protection	Works at over 105% of rating and recovers automatically
	Over Voltage Protection	None
Electrically Isolated	High Pot	Input / Output, Input / Case, Output / Case : AC500V 1minute
	Isolation	Input / Output, Input / Case, Output / Case : DC500V 100MΩ

DS10 Series Ordering Information (Single Output)

MODEL	DS10-05-3R3	DS10-05-05	DS10-05-09	DS10-05-12	DS10-05-15	DS10-05-24	DS10-12-3R3	DS10-12-05	DS10-12-09	DS10-12-12	DS10-12-15	DS10-12-24	
Input Voltage (V)	5 (4.5 ~ 7.2)						12 (8 ~ 16.5)						
Output	Vout (V)	3.3	5	9	12	15	24	3.3	5	9	12	15	24
	Iout (A)	1.8	1.6	0.8	0.7	0.6	0.33	2.3	2	1.2	0.9	0.7	0.45
Maximum Power (W)	5.94	8	7.2	8.4	9	7.92	7.59	10	10.8	10.8	10.5	10.8	
Ripple & Noise (mVp-p)	50	50	100	120	150	200	50	50	100	120	150	200	
Efficiency Typ. (%)	77	79	79	81	81	80	80	82	83	83	83	83	

MODEL	DS10-24-3R3	DS10-24-05	DS10-24-09	DS10-24-12	DS10-24-15	DS10-24-24	DS10-48-3R3	DS10-48-05	DS10-48-09	DS10-48-12	DS10-48-15	DS10-48-24	
Input Voltage (V)	24 (18 ~ 32)						48 (32 ~ 63)						
Output	Vout (V)	3.3	5	9	12	15	24	3.3	5	9	12	15	24
	Iout (A)	2.3	2	1.2	0.9	0.7	0.45	2.3	2	1.2	0.9	0.7	0.45
Maximum Power (W)	7.59	10	10.8	10.8	10.5	10.8	7.59	10	10.8	10.8	10.5	10.8	
Ripple & Noise (mVp-p)	50	50	100	120	150	200	50	50	100	120	150	200	
Efficiency Typ. (%)	80	82	85	85	85	85	80	82	84	84	84	84	

DD10 Series Ordering Information (Dual Output)

MODEL	DD10-05-0505	DD10-05-1212	DD10-05-1515	DD10-12-0505	DD10-12-1212	DD10-12-1515	DD10-24-0505	DD10-24-1212	DD10-24-1515	DD10-48-0505	DD10-48-1212	DD10-48-1515	
Input Voltage (V)	5 (4.5 ~ 7.2)			12 (8 ~ 16.5)			24 (18 ~ 32)			48 (32 ~ 63)			
Output	Vout (V)	±5	±12	±15	±5	±12	±15	±5	±12	±15	±5	±12	±15
	Iout (A)	0.8	0.35	0.3	1	0.45	0.35	1	0.45	0.35	1	0.45	0.35
Maximum Power (W)	8	8.4	9	10	10.8	10.5	10	10.8	10.5	10	10.8	10.5	
Ripple & Noise (mVp-p)	50/50	120/120	150/150	50/50	120/120	150/150	50/50	120/120	150/150	50/50	120/120	150/150	
Efficiency Typ. (%)	79	81	81	82	83	83	84	85	85	82	84	84	

Pin assignments



| Top View |

Pin No.	Single	Dual
1	+Vin	+Vin
2	-Vin	-Vin
3	-Vout	-Vout
4	No Pin	COM
5	+Vout	+Vout

Outline Dimensions : (Unit : mm (inch))

