



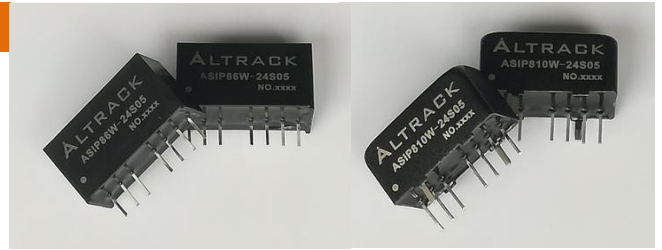
ALTRACK

ASIP83W~10W Series

ISOLATED 3W~10W REGULATED SINGLE & DUAL OUTPUT DC/DC CONVERTERS

Features

- SIP-8 Package
- Efficiency to 86%
- 4:1 2:1 Input Range
- Regulated Outputs
- Input Under Voltage Protection
- Remote On/Off
- Continuous Over Load \ Short Circuit Protection
- Meets EN60950-1.CE Mark



1500VDC ISOLATION	REMOTE CONTROL	SIP8	OCP	SCP	4 : 1
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All Specifications Typical at Nominal Line, Full Load, and 25°C Unless Otherwise Noted.

Selection Guide

Order Code	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (A)	Eff. (%)	Order Code	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (A)	Eff. (%)
ASIP83W-24S33	9~36	3.3	0.91	67	ASIP810W-24S33	9~36	3.3	2.5	77
ASIP83W-24S05	9~36	5	0.6	71	ASIP810W-24S05	9~36	5	2	81
ASIP83W-24S12	9~36	12	0.25	75	ASIP810W-24S12	9~36	12	0.83	85
ASIP83W-24S15	9~36	15	0.2	76	ASIP810W-24S15	9~36	15	0.67	86
ASIP83W-24S24	9~36	24	0.13	76	ASIP810W-24S24	9~36	24	0.42	86
ASIP83W-24D05	9~36	±5	0.3	73	ASIP810W-24D05	9~36	±5	1	83
ASIP83W-24D12	9~36	±12	0.13	76	ASIP810W-24D12	9~36	±12	0.43	86
ASIP83W-24D15	9~36	±15	0.1	76	ASIP810W-24D15	9~36	±15	0.33	86
ASIP83W-48S33	18~75	3.3	0.91	67	ASIP810W-48S33	18~75	3.3	2.5	77
ASIP83W-48S05	18~75	5	0.6	71	ASIP810W-48S05	18~75	5	2	81
ASIP83W-48S12	18~75	12	0.25	75	ASIP810W-48S12	18~75	12	0.83	85
ASIP83W-48S15	18~75	15	0.2	76	ASIP810W-48S15	18~75	15	0.67	86
ASIP83W-48S24	18~75	24	0.13	76	ASIP810W-48S24	18~75	24	0.42	86
ASIP83W-48D05	18~75	±5	0.3	73	ASIP810W-48D05	18~75	±5	1	83
ASIP83W-48D12	18~75	±12	0.13	76	ASIP810W-48D12	18~75	±12	0.43	86
ASIP83W-48D15	18~75	±15	0.1	76	ASIP810W-48D15	18~75	±15	0.33	86
ASIP86W-24S33	9~36	3.3	1.5	77					
ASIP86W-24S05	9~36	5	1.2	81					
ASIP86W-24S15	9~36	15	0.4	86					
ASIP86W-24S24	9~36	24	0.25	86					
ASIP86W-24D05	9~36	±5	0.6	83					
ASIP86W-24D12	9~36	±12	0.25	86					
ASIP86W-24D15	9~36	±15	0.2	86					
ASIP86W-48S33	18~75	3.3	1.5	77					
ASIP86W-48S05	18~75	5	1.2	81					
ASIP86W-48S12	18~75	12	0.5	85					
ASIP86W-48S15	18~75	15	0.4	86					
ASIP86W-48S24	18~75	24	0.25	86					
ASIP86W-48D05	18~75	±5	0.6	83					
ASIP86W-48D12	18~75	±12	0.25	86					
ASIP86W-48D15	18~75	±15	0.2	86					



Specifications

INPUT CHARACTERISTICS

Input Voltage range	24Vin 48Vin	W:9-36V W:18-75V
Under voltage lock out	Turn on @9Vinmin Turn off @9Vinmin Turn on @18Vinmin Turn off @18Vinmin	8.8V 8.0V 17V 16V
Input Surge Voltage(100ms)	36Vinmax 75Vinmax	50V max 80V max
Input Filter		LC Type
Positive Logic Remote on/off		See Note

OUTPUT CHARACTERISTICS

Voltage Accuracy		±1% max
Transient Response	25% Step Load Change	
Error band		±5% Vout
Recovery Time		<500us
External Trim Adj.Range		90-110%Vout
Temperature Coefficient		±0.03%/°C
Short Circuit Protection		Continuous
Line Regulation		±0.2%max
Load Regulation		±0.5%max
Ripple and Noise		100 mVp-p typ.
Output Current Limit		110%-160%
Start-up Time		50ms max.

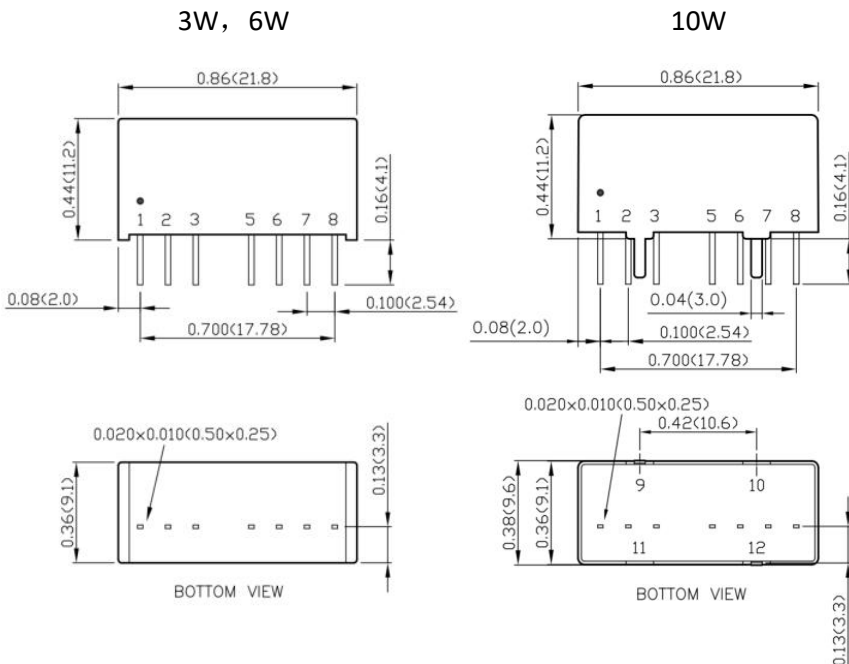
GENERAL CHARACTERISTICS

Eff.		See Note
Isolation Voltage	I/O I/CASE O/CASE	1500 VDC 1500 VDC 500 VDC
Isolation Resistance	(500VDC)	10 ⁷ Ohms min
Isolation Capacitance		1000pF typ.
Switching frequency		500kHz typ.
Case Temperature		105°C max.
Cooling		Natural Convection
Storage Temperature		-55°C to +105°C
Humidity		95%RH max
MTBF	MIL-HDBK-217F	1000K.Hrs
Dimensions		0.86 x 0.44 x 0.37 inch 21.8x9.5x11.5 mm
Case Material		Five-Sided shield metal case
Weight		12g

EMC CHARACTERISTICS

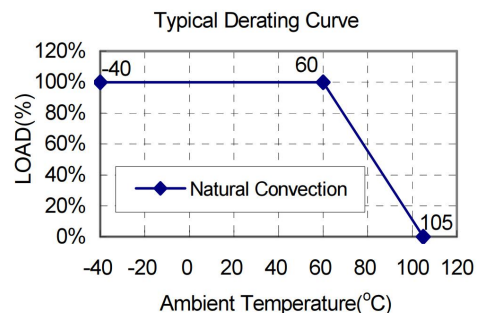
EMI	Conduction	EN 55032, FCC part 15	B
	Radiation	EN 55032, FCC part 15	B
EMS		EN55024	
	ESD	EN 61000-4-2 Air ± 6kV, Contact±4kV	B
	Radiated immunity	EN 61000-4-3 10V/m	A
	Fast transient	EN 61000-4-4 ±2kV	B
	Surge	EN 61000-4-5 ±2kV	B
Conducted immunity	EN 61000-4-6 10Vrms	A	

MECHANICAL DIMENSIONS & PIN CONNECTION



PIN CONNECTION

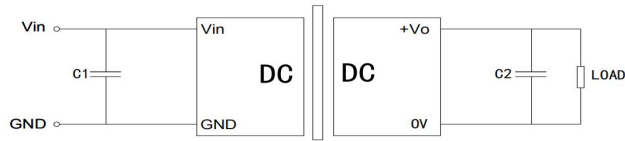
Pin	Single	Dual
1	-Input	-Input
2	+Input	+Input
3	Remote	Remote
4	NP	NP
5	NP	NP
6	+V Output	+V Output
7	-V Output	Common
8	NC	-V Output





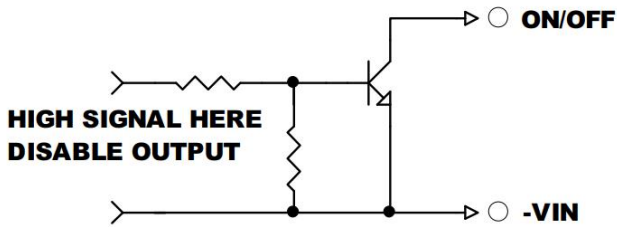
Design reference

Application Circuit

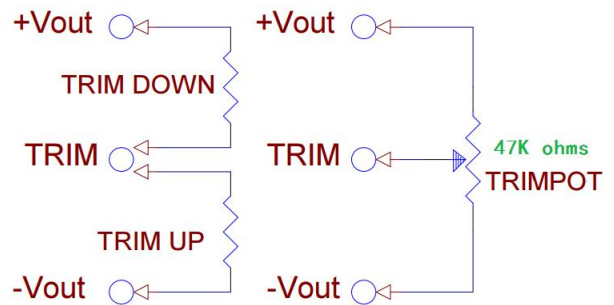


C1 Typical Value: recommend 2.2uF/1W output power
 C2 Typical Value: recommend 100uF/1A output current

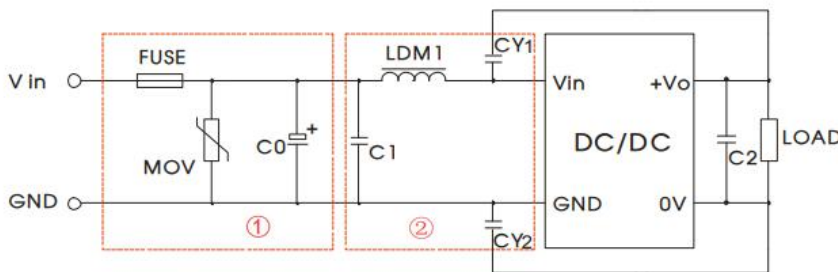
Remote on/off control



External Output Trim



EMC Recommend Circuit



Position	Parameter
FUSE	According to the actual choice
MOV	According to the actual choice
C0	220uF Electrolytic capacitor
C1	2.2uF/1W output power
C2	100uF/1A output current
LDM1	According to the actual choice
CY1	1nF/2KV
CY2	1nF/2KV

The first part is used for EMC testing, and the second part is used for EMI filtering, which can be selected according to requirements.

Note

1. Measured From High Line to Low Line.
2. Measured From Full Load to min. Load.
3. The output ripple and noise is measured with 10uF Aluminium electrolytic capacitor and 0.1uF Ceramic capacitor across output.
4. Positive Logic
 Module ON >+3.5V or Open Circuit
 Module OFF < 0.5Vdc or Short to -input
5. Operation Ambient Temperature Range
 - 40°C ~85°C
 Derating, Above 60°C, Linearly to Zero Power at +105°C