Features

- Efficiency up to 91%
- 1500VDC Isolation
- Singl/Double output
- Continous short circuit protection
- Over load protection
- Wide temperature -40℃ to 85℃
- Low ripple and noise
- Remote (ON/OFF)
- Wide input voltage rang (4:1)
- Metal case

Model Selection Guide

Order Code	Vin(V)		Output		Recommend capacitive(uF)	Efficiency(%) (Typ)
	Nominal	Range	Vo(V)	Io(mA)		
DDMF20-24S3V3	24	9-36	3.3	5000	680	86
DDMF20-24S05			5	4000	680	91
DDMF20-24S09			9	2222	680	89
DDMF20-24S12			12	1667	470	91
DDMF20-24S15			15	1333	470	91
DDMF20-24S24			24	833	330	92
DDMF20-24D05 *			±5	±2000	330	87
DDMF20-24D12 *			±12	±833	330	88
DDMF20-24D15 *			±15	±667	220	88
DDMF20-48S3V3	48	18-72	3.3	5000	680	86
DDMF20-48S05			5	4000	680	90
DDMF20-24S09			9	2222	680	91
DDMF20-48S12			12	1667	470	91
DDMF20-48S15			15	1333	470	92
DDMF20-48S24			24	833	330	92
DDMF20-48D05 *			±5	±2000	330	87
DDMF20-48D12 *			±12	±833	330	89
DDMF20-48D15 *			±15	±667	220	90

Note: “ * ” marked model is developing

Input Characteristics

Parameter	Condition	Min	Typ	Max	Units
Input Surge Voltage (1 sec. Max.)	24V Input Models	-0.7	--	50	VDC
	48V Input Models	-0.7	--	90	
Input Filter Type	All Models	Internal Capacitor			

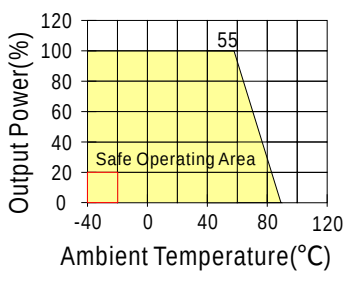
Output Characteristics

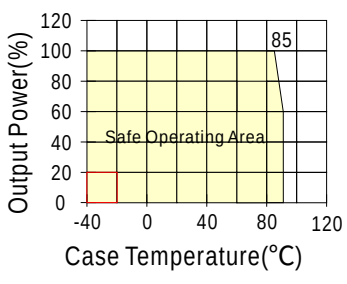
Parameter	Condition	Min	Typ	Max	Units
Output Voltage Accuracy	+Vo	--	1%	--	%
	-Vo	--	2%	3%	%
Load regulation	10%～100% load	--	±0.5	±1	%
Line regulation	Vin(Min~Max)	±0.1	--	±0.5	%
Ripple and noise	BW=DC to 20MHz	--	50	100	mVp-p
Switching frequency	Full load,nominal input	--	300	400	KHz
Transient Recovery Time	25% Load Step Change	--	--	500	uS
Short circuit Protection		Continuous,Automatic Recovery			

General Characteristics

Parameter	Condition	Min	Typ	Max	Units
Operating Temperature	All output types	-40	--	+85	℃
Storage		-55	--	+125	℃
Storage humidity		--	--	+95	%
Cooling	Free air convection	--	--	--	
Isolation voltage	2mA≤1minute	1000	--	--	VDC
Isolation resistance	500VDC	1000	--	--	MΩ
MTBF	2×10^5				K hours
Case material		Metal			

Temperature Derating Graph Curve



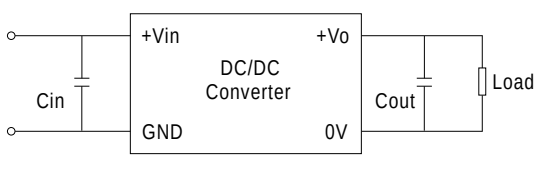


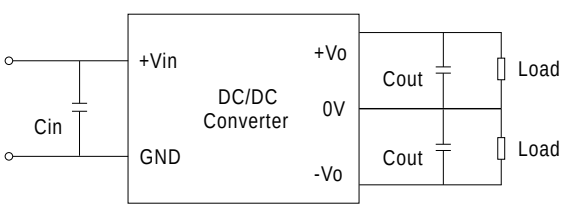
Design & Feature Considerations

1. Input/Output Ripple Reduction

Reduce output ripple, it is recommended to use capacitors at the input/output.

It is recommended to use 10uF~100uF capacitors at the input; 47~220uF capacitors at the output.





2. Overload Protection

Tthe products provide protection against overload, the unit is equipped with internal current limiting circuitry .

3.Remote On/Off

To turn the power module off

Connect REM and -Vin,0V < Vrem < 1 v, Irem < 1mA;

To turn the power module on

1)Connect REM and +Vin,30V > Vrem > 5V;

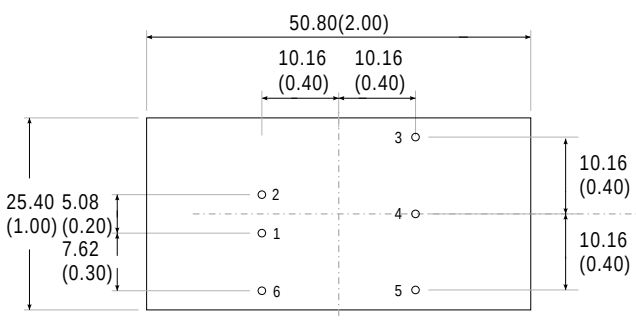
2) REM pin is no connected.

Note

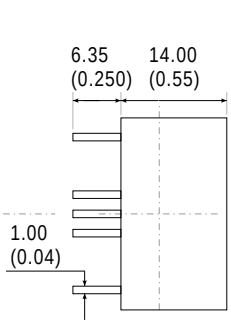
1.All the specifications typical at Ta=+25℃ resistive load, nominal input voltage and rated output current unless otherwise noted.
2.Operation under no-load conditions will not damage these modules; however they may not meet all specifications listed.
3.Ripple & Noise measurement bandwidth is 0-20MHz.
3.Other input and output voltage may be available, please
4.All DC/DC converters should be externally fused at the front end for protection.
5.Specifications subject to change without notice

Mechanical Dimension & Pin Connections

Bottom View



Lateral View



Note:
Unit:mm(inch)

Pin	1	2	3	4	5	6
Single	-Vin	+Vin	+Vo	TRIM	-Vo	REM
Double	-Vin	+Vin	+Vo	COM	-Vo	REM