



V3-2W Series

2W Unregulated Single & Dual output

Features

- SIP7 / DIP14 Package
- 1000 VDC Isolation
- Up to 6000 VDC Isolation
- Efficiency up to 89%
- Non-Conductive Black Plastic Case
- Operation Temperature Range -40 ~ 100°C max.



PART NUMBER STRUCTURE

V3 - 12 05 SS H6
 (1) (2) (3) (4) (5)

(1) Series

(2) Input Voltage Range

- 3R3** - 2.97-3.63 V
- 05** - 4.5-5.5 V
- 12** - 10.8-13.2 V
- 15** - 13.5-16.5 V
- 24** - 21.6-26.4 V

(3) Output Voltage

- 3R3** - 3.3 V
- 05** - 5.0 V
- 7R2** - 7.2 V
- 09** - 9.0 V
- 12** - 12 V
- 15** - 15 V
- 18** - 18 V
- 24** - 24 V

(4) Case & Output Type

- SS** - SIP Case, Single Output
- S** - SIP Case, Dual Output
- DS** - DIP Case, Single Output
- D** - DIP Case, Dual Output

(5) Isolation Voltage (Optional)

- Blank** - 1 KVDC
- H** - 3 KVDC
- H2** - 2 KVDC
- H4** - 4 KVDC
- H5** - 5.2 KVDC
- H6** - 6 KVDC

ALL SPECIFICATIONS ARE TYPICAL AT 25°C, NOMINAL INPUT AND FULL LOAD UNLESS OTHERWISE NOTED

Model Number	Input Voltage Range (VDC)	Input Current		Output Voltage (VDC)	Output Current Full Load (mA)	Efficiency @FL (% , typ.)	Capacitive Load @ FL (μF, max.)
		No-Load (mA, max.)	Full Load (mA, typ.)				
V3-3R33R3S	2.97-3.63	30	526	±3.3	±200	76	±220
V3-3R305S	2.97-3.63	45	777	±5	±200	78	±220
V3-3R37R2S	2.97-3.63	50	777	±7.2	±139	78	±220
V3-3R309S	2.97-3.63	50	777	±9	±111	78	±220
V3-3R312S	2.97-3.63	50	777	±12	±83	78	±220
V3-3R315S	2.97-3.63	50	748	±15	±67	81	±220
V3-3R318S	2.97-3.63	50	758	±18	±56	80	±220
V3-3R324S	2.97-3.63	45	758	±24	±42	80	±220
V3-053R3S	4.5-5.5	30	383	±3.3	±200	69	±220
V3-0505S	4.5-5.5	35	541	±5	±200	74	±220
V3-057R2S	4.5-5.5	100	519	±7.2	±139	77	±220
V3-0509S	4.5-5.5	40	513	±9	±111	78	±220
V3-0512S	4.5-5.5	40	500	±12	±83	80	±220
V3-0515S	4.5-5.5	35	488	±15	±67	82	±220
V3-0518S	4.5-5.5	35	482	±18	±56	83	±220
V3-0524S	4.5-5.5	45	488	±24	±42	82	±220
V3-123R3S	10.8-13.2	20	155	±3.3	±200	71	±220
V3-1205S	10.8-13.2	25	222	±5	±200	75	±220
V3-127R2S	10.8-13.2	25	214	±7.2	±139	78	±220
V3-1209S	10.8-13.2	25	208	±9	±111	80	±220
V3-1212S	10.8-13.2	25	208	±12	±83	80	±220
V3-1215S	10.8-13.2	25	201	±15	±67	83	±220
V3-1218S	10.8-13.2	25	196	±18	±56	85	±220
V3-1224S	10.8-13.2	20	194	±24	±42	86	±220
V3-153R3S	13.5-16.5	20	126	±3.3	±200	70	±220
V3-1505S	13.5-16.5	15	178	±5	±200	75	±220
V3-157R2S	13.5-16.5	20	171	±7.2	±139	78	±220
V3-1509S	13.5-16.5	20	171	±9	±111	78	±220
V3-1512S	13.5-16.5	15	161	±12	±83	83	±220
V3-1515S	13.5-16.5	16	161	±15	±67	83	±220
V3-1518S	13.5-16.5	20	161	±18	±56	83	±220
V3-1524S	13.5-16.5	20	161	±24	±42	83	±220
V3-243R3S	21.6-26.4	10	79	±3.3	±200	70	±220
V3-2405S	21.6-26.4	15	110	±5	±200	76	±220
V3-247R2S	21.6-26.4	15	108	±7.2	±139	77	±220
V3-2409S	21.6-26.4	15	103	±9	±111	81	±220
V3-2412S	21.6-26.4	15	100	±12	±83	83	±220
V3-2415S	21.6-26.4	15	98	±15	±67	85	±220
V3-2418S	21.6-26.4	15	98	±18	±56	85	±220
V3-2424S	21.6-26.4	15	96	±24	±42	87	±220

Model Number	Input Voltage Range (VDC)	Input Current		Output Voltage (VDC)	Output Current Full Load (mA)	Efficiency @FL (% , typ.)	Capacitive Load @ FL (μF, max.)
		No-Load (mA, max.)	Full Load (mA, typ.)				
V3-3R33R3D	2.97-3.63	30	548	±3.3	±200	73	±220
V3-3R305D	2.97-3.63	50	787	±5	±200	77	±220
V3-3R37R2D	2.97-3.63	50	787	±7.2	±139	77	±220
V3-3R309D	2.97-3.63	50	787	±9	±111	77	±220
V3-3R312D	2.97-3.63	50	787	±12	±83	77	±220
V3-3R315D	2.97-3.63	50	767	±15	±67	79	±220
V3-3R318D	2.97-3.63	50	767	±18	±56	79	±220
V3-3R324D	2.97-3.63	50	767	±24	±42	79	±220
V3-053R3D	4.5-5.5	30	338	±3.3	±200	78	±220
V3-0505D	4.5-5.5	35	548	±5	±200	73	±220
V3-057R2D	4.5-5.5	35	513	±7.2	±139	78	±220
V3-0509D	4.5-5.5	36	513	±9	±111	78	±220
V3-0512D	4.5-5.5	38	488	±12	±83	82	±220
V3-0515D	4.5-5.5	30	482	±15	±67	82	±220
V3-0518D	4.5-5.5	35	471	±18	±56	84	±220
V3-0524D	4.5-5.5	45	482	±24	±42	83	±220
V3-123R3D	10.8-13.2	15	138	±3.3	±200	80	±220
V3-1205D	10.8-13.2	25	219	±5	±200	76	±220
V3-127R2D	10.8-13.2	20	206	±7.2	±139	81	±220
V3-1209D	10.8-13.2	20	206	±9	±111	81	±220
V3-1212D	10.8-13.2	25	201	±12	±83	83	±220
V3-1215D	10.8-13.2	25	201	±15	±67	83	±220
V3-1218D	10.8-13.2	25	198	±18	±56	84	±220
V3-1224D	10.8-13.2	25	192	±24	±42	87	±220
V3-153R3D	13.5-16.5	20	131	±3.3	±200	67	±220
V3-1505D	13.5-16.5	15	165	±5	±200	81	±220
V3-157R2D	13.5-16.5	20	178	±7.2	±139	75	±220
V3-1509D	13.5-16.5	20	178	±9	±111	75	±220
V3-1512D	13.5-16.5	20	161	±12	±83	83	±220
V3-1515D	13.5-16.5	20	161	±15	±67	83	±220
V3-1518D	13.5-16.5	20	167	±18	±56	80	±220
V3-1524D	13.5-16.5	20	167	±24	±42	80	±220
V3-243R3D	21.6-26.4	15	71	±3.3	±200	79	±220
V3-2405D	21.6-26.4	13	111	±5	±200	75	±220
V3-247R2D	21.6-26.4	15	114	±7.2	±139	76	±220
V3-2409D	21.6-26.4	15	102	±9	±111	82	±220
V3-2412D	21.6-26.4	15	99	±12	±83	83	±220
V3-2415D	21.6-26.4	15	99	±15	±67	84	±220
V3-2418D	21.6-26.4	15	98	±18	±56	85	±220
V3-2424D	21.6-26.4	15	95	±24	±42	88	±220

Model Number	Input Voltage Range (VDC)	Input Current		Output Voltage (VDC)	Output Current Full Load (mA)	Efficiency @FL (% , typ.)	Capacitive Load @ FL (µF, max.)
		No-Load (mA, max.)	Full Load (mA, typ.)				
V3-3R33R3SS	2.97-3.63	35	533	3.3	400	75	470
V3-3R305SS	2.97-3.63	45	797	5	400	76	470
V3-3R37R2SS	2.97-3.63	50	777	7.2	278	78	470
V3-3R309SS	2.97-3.63	50	777	9	222	78	470
V3-3R312SS	2.97-3.63	50	758	12	167	80	470
V3-3R315SS	2.97-3.63	47	777	15	133	78	470
V3-3R318SS	2.97-3.63	50	777	18	111	78	470
V3-3R324SS	2.97-3.63	55	777	24	83	78	470
V3-053R3SS	4.5-5.5	26	347	3.3	400	76	470
V3-0505SS	4.5-5.5	30	494	5	400	81	470
V3-057R2SS	4.5-5.5	35	494	7.2	278	81	470
V3-0509SS	4.5-5.5	40	488	9	222	82	470
V3-0512SS	4.5-5.5	35	471	12	167	85	470
V3-0515SS	4.5-5.5	35	476	15	133	84	470
V3-0518SS	4.5-5.5	40	494	18	111	81	470
V3-0524SS	4.5-5.5	45	476	24	83	84	470
V3-123R3SS	10.8-13.2	26	151	3.3	400	73	470
V3-1205SS	10.8-13.2	35	206	5	400	81	470
V3-127R2SS	10.8-13.2	18	198	7.2	278	84	470
V3-1209SS	10.8-13.2	20	201	9	222	83	470
V3-1212SS	10.8-13.2	20	194	12	167	86	470
V3-1215SS	10.8-13.2	25	196	15	133	85	470
V3-1218SS	10.8-13.2	25	201	18	111	83	470
V3-1224SS	10.8-13.2	25	203	24	83	82	470
V3-153R3SS	13.5-16.5	25	126	3.3	400	70	470
V3-1505SS	13.5-16.5	15	161	5	400	83	470
V3-157R2SS	13.5-16.5	20	161	7.2	278	83	470
V3-1509SS	13.5-16.5	15	150	9	222	89	470
V3-1512SS	13.5-16.5	15	157	12	167	85	470
V3-1515SS	13.5-16.5	12	155	15	133	86	470
V3-1518SS	13.5-16.5	20	157	18	111	85	470
V3-1524SS	13.5-16.5	20	161	24	83	83	470
V3-243R3SS	21.6-26.4	15	70	3.3	400	79	470
V3-2405SS	21.6-26.4	15	103	5	400	81	470
V3-247R2SS	21.6-26.4	15	104	7.2	278	80	470
V3-2409SS	21.6-26.4	15	100	9	222	83	470
V3-2412SS	21.6-26.4	15	98	12	167	85	470
V3-2415SS	21.6-26.4	15	99	15	133	84	470
V3-2418SS	21.6-26.4	15	102	18	111	82	470
V3-2424SS	21.6-26.4	20	103	24	83	81	470

Model Number	Input Voltage Range (VDC)	Input Current		Output Voltage (VDC)	Output Current Full Load (mA)	Efficiency @FL (% , typ.)	Capacitive Load @ FL (µF, max.)
		No-Load (mA, max.)	Full Load (mA, typ.)				
V3-3R33R3DS	2.97-3.63	40	533	3.3	400	75	470
V3-3R305DS	2.97-3.63	50	797	5	400	76	470
V3-3R37R2DS	2.97-3.63	50	777	7.2	278	78	470
V3-3R309DS	2.97-3.63	50	777	9	222	78	470
V3-3R312DS	2.97-3.63	50	777	12	167	78	470
V3-3R315DS	2.97-3.63	50	777	15	133	78	470
V3-3R318DS	2.97-3.63	50	777	18	111	78	470
V3-3R324DS	2.97-3.63	50	777	24	83	78	470
V3-053R3DS	4.5-5.5	25	338	3.3	400	78	470
V3-0505DS	4.5-5.5	30	500	5	400	80	470
V3-057R2DS	4.5-5.5	30	482	7.2	278	83	470
V3-0509DS	4.5-5.5	30	482	9	222	83	470
V3-0512DS	4.5-5.5	35	482	12	167	83	470
V3-0515DS	4.5-5.5	30	471	15	133	85	470
V3-0518DS	4.5-5.5	35	471	18	111	85	470
V3-0524DS	4.5-5.5	45	488	24	83	82	470
V3-123R3DS	10.8-13.2	18	145	3.3	400	76	470
V3-1205DS	10.8-13.2	18	208	5	400	80	470
V3-127R2DS	10.8-13.2	20	201	7.2	278	83	470
V3-1209DS	10.8-13.2	20	201	9	222	83	470
V3-1212DS	10.8-13.2	20	194	12	167	86	470
V3-1215DS	10.8-13.2	25	203	15	133	82	470
V3-1218DS	10.8-13.2	25	203	18	111	82	470
V3-1224DS	10.8-13.2	25	203	24	83	82	470
V3-153R3DS	13.5-16.5	25	126	3.3	400	70	470
V3-1505DS	13.5-16.5	15	163	5	400	82	470
V3-157R2DS	13.5-16.5	20	163	7.2	278	82	470
V3-1509DS	13.5-16.5	20	157	9	222	85	470
V3-1512DS	13.5-16.5	20	157	12	167	85	470
V3-1515DS	13.5-16.5	13	159	15	133	84	470
V3-1518DS	13.5-16.5	20	161	18	111	83	470
V3-1524DS	13.5-16.5	20	161	24	83	83	470
V3-243R3DS	21.6-26.4	15	73	3.3	400	75	470
V3-2405DS	21.6-26.4	15	103	5	400	81	470
V3-247R2DS	21.6-26.4	15	104	7.2	278	80	470
V3-2409DS	21.6-26.4	15	103	9	222	81	470
V3-2412DS	21.6-26.4	15	100	12	167	83	470
V3-2415DS	21.6-26.4	15	97	15	133	86	470
V3-2418DS	21.6-26.4	15	99	18	111	84	470
V3-2424DS	21.6-26.4	20	100	24	83	83	470

INPUT SPECIFICATIONS					
Parameter	Conditions	Min.	Typ.	Max.	Unit
Input Voltage Range	3.3 V Input	2.97	3.3	3.63	VDC
	5 V Input	4.5	5	5.5	
	12 V Input	10.8	12	13.2	
	15 V Input	13.5	15	16.5	
	24 V Input	21.6	24	26.4	
Input Filter		Capacitor			
Input Reflected Ripple Current (1)			20		mApk-pk
Recommended input fuse (slow blow)	3.3 V Input	2			A
	5 V Input	1.5			
	12 V Input	0.6			
	15 V Input	0.5			
	24 V Input	0.3			
Note :					
1. Measured with a simulated source inductance of 12 μ H and a source capacitor Cin (47 μ F, ESR<1.0 Ω at 100kHz).					

OUTPUT SPECIFICATIONS					
Parameter	Conditions	Min.	Typ.	Max.	Unit
Output Voltage Accuracy		-3		+3	%
Line Regulation	For 1% Vin Change	-1.3		+1.3	%
Load Regulation	From 20% to 100% Load	-15		+15	%
	Output 3.3V Model	-20		+20	%
Ripple & Noise	20MHz bandwidth			75	mVpk-pk
Short Circuit Protection		Short Term (1sec)			
Temperature Coefficient		-0.02		+0.02	%/°C
Maximum Capacitive Load	Minimum Vin and constant resistive load	See Table			

ABSOLUTE MAXIMUM RATINGS					
Parameter	Conditions	Min.	Typ.	Max.	Unit
Input Surge Voltage (100 ms)	3.3 V Input			6	VDC
	5 V Input			7	
	12 V Input			15	
	15 V Input			18	
	24 V Input			28	
Soldering Temperature	1.5mm from case 10sec max.			260	°C
Note : These are stress ratings. Exposure of devices to any of these conditions may adversely affect long-term reliability.					

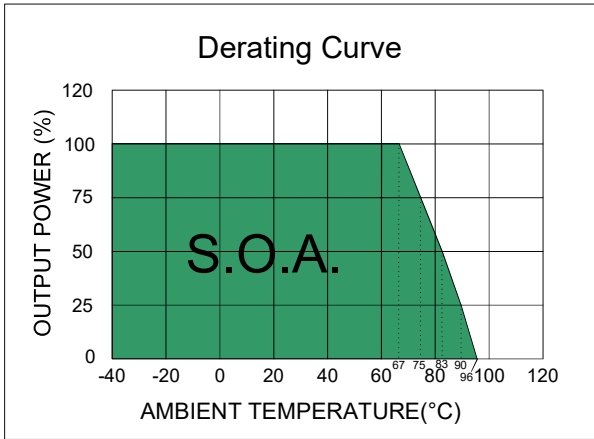
GENERAL SPECIFICATIONS						
Parameter	Conditions	Min.	Typ.	Max.	Unit	
Isolation Voltage	Input-output, and rated for 60sec	Standard Type	1000			VDC
		Suffix "H2"	2000			
		Suffix "H"	3000			
		Suffix "H4"	4000			
		Suffix "H5"	5200			
		Suffix "H6"	6000			
Isolation Resistance	Input-output	1000			MΩ	
Isolation Capacitance	Input-output		60		pF	
Switching Frequency			80		kHz	
MTBF	MIL-HDBK-217 F @ 25°C	1.121			M hours	
Safety Standard	IEC / EN / UL 62368-1	Designed to meet				
Environmental compliance		RoHS				

ENVIRONMENT SPECIFICATIONS					
Parameter	Conditions	Min.	Typ.	Max.	Unit
Operating Ambient Temperature	See the Derating Curve	-40		100	°C
Maximum Case Temperature				100	°C
Thermal Impedance	3.3V output	55.7			°C/W
	Others	52.6			
Storage Humidity				95	% rel. H
Storage Temperature		-55		125	°C
Cooling	Natural Convection	30-65 LFM			

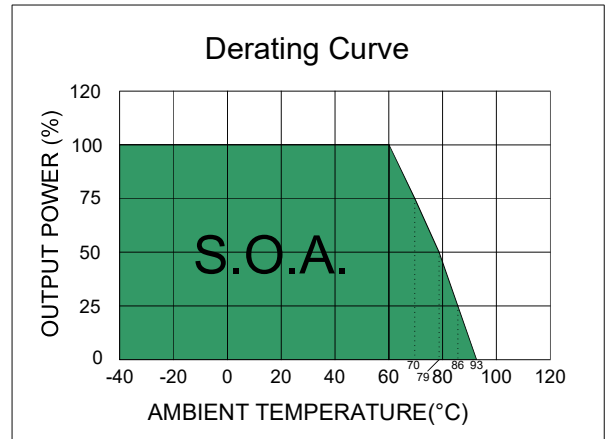
EMC SPECIFICATIONS			
Parameter	Standard	Condition	Criterion
Conducted Emissions	EN55032	with external components	B
Radiated Emissions	EN55032		B
ESD	IEC 61000-4-2	Air: ±8kV Contact: ±6kV	A
RS	IEC 61000-4-3	10V/m	A
EFT	IEC 61000-4-4	±2.0kV with external components	A
Surge	IEC 61000-4-5	±0.5kV with external components	A
CS	IEC 61000-4-6	10Vrms	A
PFMF	IEC 61000-4-8	1A/m (for SIP) 10A/m (for DIP)	A

PHYSICAL SPECIFICATIONS		
Parameter	Value	
Case Material	Nonconductive Black Plastic (UL94V-0 rated)	
Pin Material	Alloy 42	
Potting Material	Epoxy (UL94V-0 rated)	
Weight	SIP Case	2.3 / 2.7 g, typ.
	DIP Case	2.6 g, typ.
Dimensions	SIP Case	0.76" x 0.24" x 0.39" / 0.76" x 0.28" x 0.39"
	DIP Case	0.80" x 0.40" x 0.27"

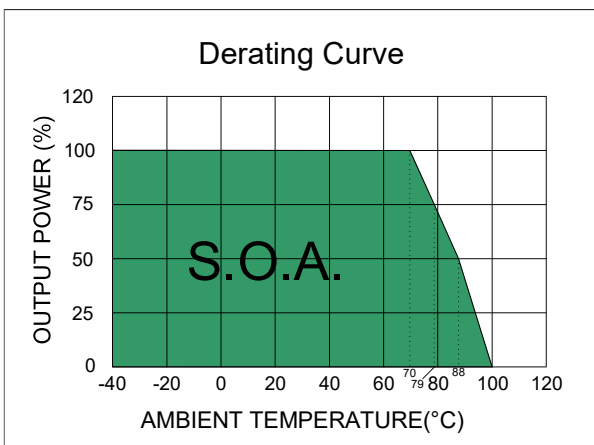
ELECTRICAL CHARACTERISTIC CURVES



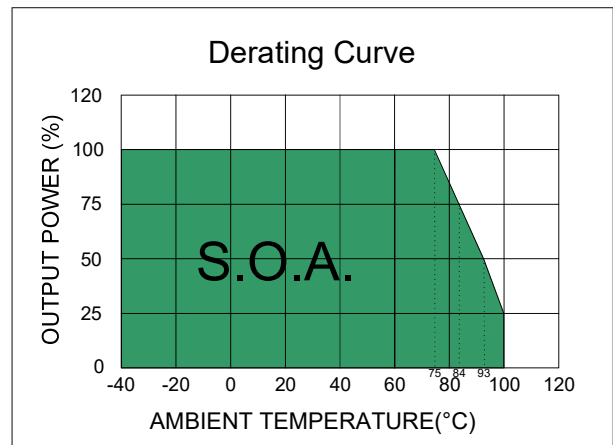
Vo 3.3V



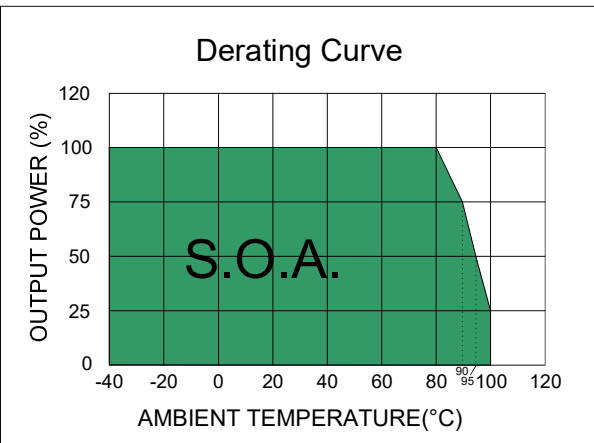
(Efficiency : 73% ~ 77%)



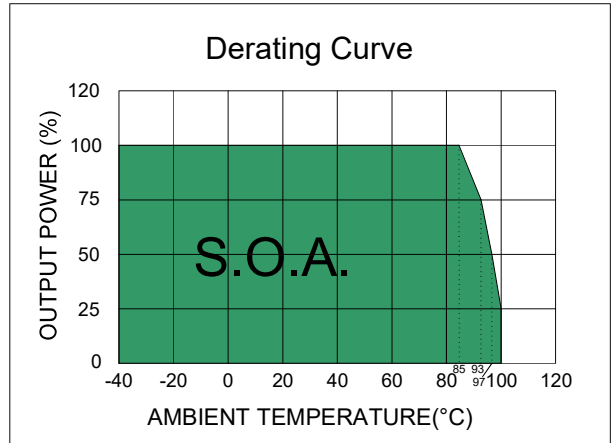
(Efficiency : 78% ~ 80%)



(Efficiency : 81% ~ 84%)

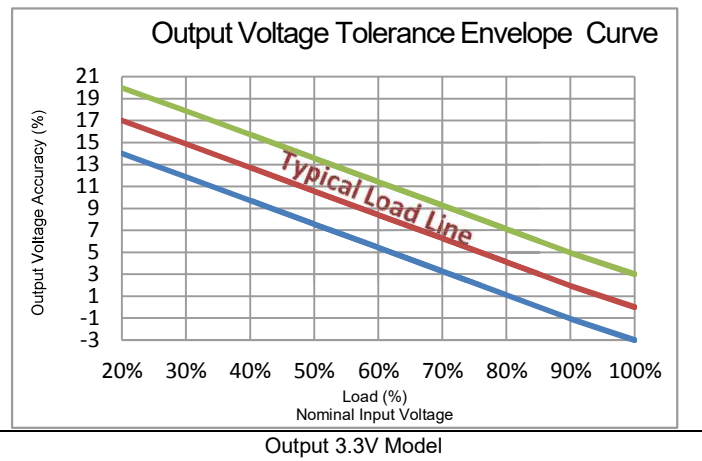
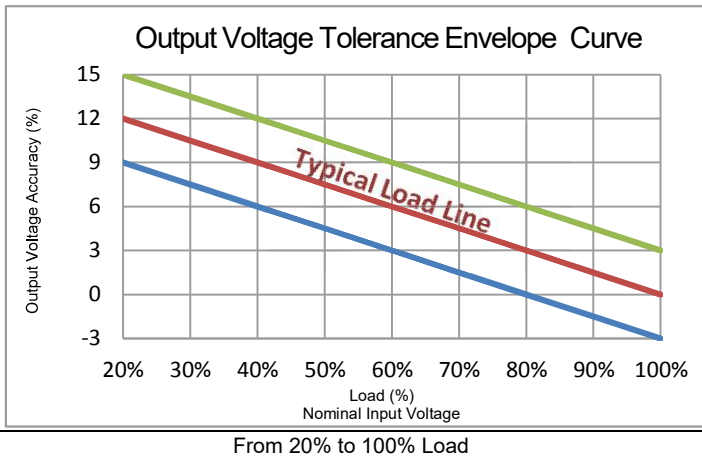


(Efficiency : 85% ~ 87%)



(Efficiency : 88% ~ 89%)

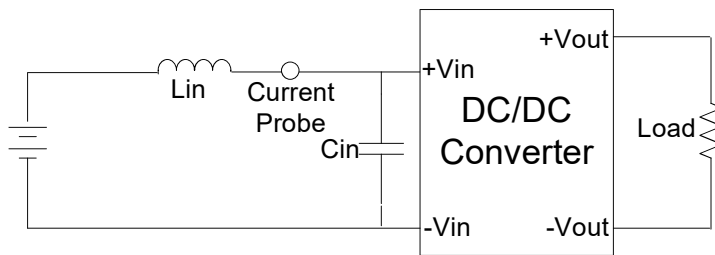
ELECTRICAL CHARACTERISTIC CURVES



TEST CONFIGURATIONS

Input Reflected Ripple Current Test Step

Input reflected ripple current is measured with a source inductor L_{in} ($12\mu H$) and a source capacitor C_{in} ($47\mu F$, $ESR < 1.0\Omega$ at $100kHz$) at nominal input and full load.



DESIGN & FEATURE CONFIGURATIONS

Isolation Voltage

This series is designed to meet the functional insulation of UL, both input and output should be maintained within SELV limits (less than 42.4V peak, or 60VDC).

The isolation test voltage represents a measure of immunity to transient voltages and the part should never be used as an element of a safety isolation system. The part could be expected to function correctly with hundreds of volts offset applied continuously across the isolation barrier; but then the circuitry on both sides of the barrier must be regarded as operating at an unsafe voltage and further isolation/insulation systems must form a barrier between these circuits and any user-accessible circuitry according to safety standard requirements.

Repeated High-Voltage Isolation Testing

Repeated high-voltage isolation testing of a barrier component can actually degrade isolation capability, to a lesser or greater degree depending on materials, construction and environment.

This series has isolation transformers without additional insulation between primary and secondary windings of enameled wire.

While parts can be expected to withstand several times the stated test voltage, the isolation capability does depend on the wire insulation.

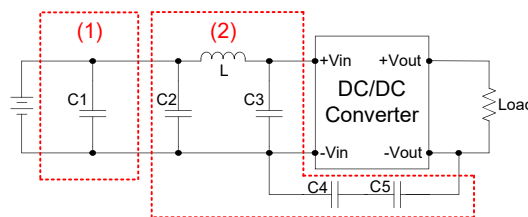
Any material including the enamel (typically polyurethane) is susceptible to eventual chemical degradation when subject to very high applied voltage, thus implying that the number of tests should be strictly limited.

We strongly advise against repeated high voltage isolation testing, but if it is absolutely required, the isolation test voltage should be reduced by 20% from specified test voltage.

DESIGN & FEATURE CONFIGURATIONS

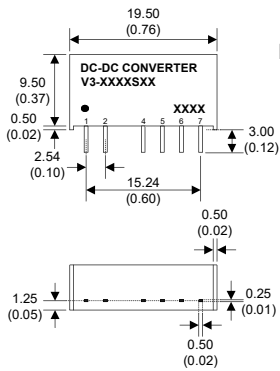
EMC Filter

The part (1) Circuit is used to meet Surge & EFT test, and the part (2) Circuit is used to meet EMI test.



	C1	C2	L	C3	C4	C5
V3-3R3XXXXX	NIPPON Chemi-Con KY Series 470µF, 100V	MLCC 2.2µF, 100V	18µH	MLCC 2.2µF, 100V	MLCC 470pF, 3KV	MLCC 1000pF, 3KV
V3-05XXXXXX						
V3-12XXXXXX						
V3-15XXXXXX						
V3-24XXXX(H-H2)						
V3-24XXXX(H4-H6)						

MECHANICAL SPECIFICATIONS



SIP7 Package

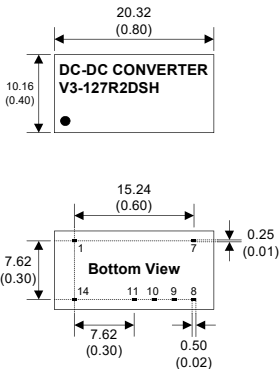
- Notes : All dimensions are typical in millimeters (inches).
1. Pin dimension tolerance: ± 0.05 (± 0.002)
 2. Pin pitch and length tolerance: ± 0.35 (± 0.014)
 3. Pin to case tolerance: ± 0.5 (± 0.02)
 4. Case Tolerance: ± 0.5 (± 0.02)

PIN CONNECTIONS				
PIN NUMBER	SINGLE	DUAL	SINGLE-H	DUAL-H
1	+Vin	+Vin	+Vin	+Vin
2	-Vin	-Vin	-Vin	-Vin
4	-Vout	-Vout	N.P.	N.P.
5	N.P.	COM	-Vout	-Vout
6	+Vout	+Vout	N.P.	COM
7	N.P.	N.P.	+Vout	+Vout

N.P. : No PIN

The thickness of the following models is 7.2mm

The 3.3 V Input Models									
V3-3R305SS	V3-3R37R2SS	V3-3R309SS	V3-3R312SSH	V3-3R315SS	V3-3R318SS	V3-3R324SS	V3-3R33R3S	V3-3R305S	V3-3R37R2SH5
V3-3R305SSH	V3-3R37R2SSH	V3-3R309SSH	V3-3R312SSH4	V3-3R315SSH	V3-3R318SSH	V3-3R324SSH	V3-3R33R3SH	V3-3R305SH	V3-3R37R2SH6
V3-3R305SSH4	V3-3R37R2SSH4	V3-3R309SSH4	V3-3R312SSH5	V3-3R315SSH4	V3-3R318SSH4	V3-3R324SSH4	V3-3R33R3SH4	V3-3R305SH4	
V3-3R305SSH5	V3-3R37R2SSH5	V3-3R309SSH5	V3-3R312SSH6	V3-3R315SSH5	V3-3R318SSH5	V3-3R324SSH5	V3-3R33R3SH5	V3-3R305SH5	
V3-3R305SSH6	V3-3R37R2SSH6	V3-3R309SSH6		V3-3R315SSH6	V3-3R318SSH6	V3-3R324SSH6	V3-3R33R3SH6	V3-3R305SH6	
The 5 V Input Models					The 12 V Input Models				
V3-0505SSH4			V3-0515SH4		V3-123R3SSH6	V3-1205SH5			
V3-0505SSH5	V3-057R2SH5	V3-0515SH5	V3-0515SH5						
	V3-057R2SH6	V3-0515SH6	V3-0515SH6						



DIP14 Package

- Notes : All dimensions are typical in millimeters (inches).
1. Pin dimension tolerance: ± 0.05 (± 0.002)
 2. Pin pitch and length tolerance: ± 0.35 (± 0.014)
 3. Pin to case tolerance: ± 0.5 (± 0.02)
 4. Case Tolerance: ± 0.5 (± 0.02)

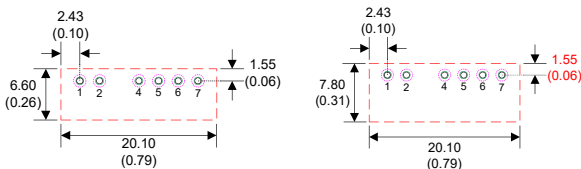
PIN CONNECTIONS				
PIN NUMBER	SINGLE	DUAL	SINGLE-H	DUAL-H
1	-Vin	-Vin	-Vin	-Vin
7	N.C.	N.C.	N.C.	N.C.
8	N.P.	COM	+Vout	+Vout
9	+Vout	+Vout	N.P.	COM
10	N.P.	N.P.	-Vout	-Vout
11	-Vout	-Vout	N.P.	N.P.
14	+Vin	+Vin	+Vin	+Vin

N.P. : No PIN

N.C. : No Connection

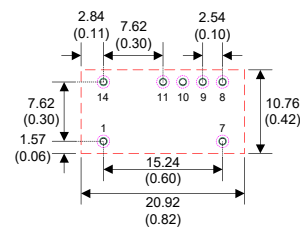
RECOMMENDED FOOTPRINT DETAILS

SIP7 Package



- Notes : 1. All dimensions are typical in millimeters (inches).
- Through hole (black) 1 ~ 7: $\varnothing 0.80$ (0.031)
 - Top view pad (green) 1 ~ 7: $\varnothing 1.00$ (0.039)
 - Bottom view pad (pink) 1 ~ 7: $\varnothing 1.60$ (0.063)

DIP14 Package



- Notes : 1. All dimensions are typical in millimeters (inches).
- Through hole (black) 1 ~ 14: $\varnothing 0.80$ (0.031)
 - Top view pad (green) 1 ~ 14: $\varnothing 1.00$ (0.039)
 - Bottom view pad (pink) 1 ~ 14: $\varnothing 1.60$ (0.063)