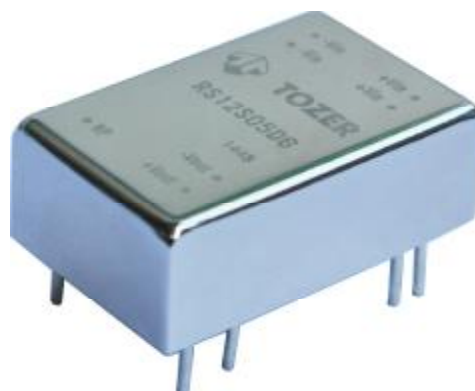


ISOLATED 6W REGULATED SINGLE & DUAL OUTPUT DC/DC CONVERTERS
FEATURE

- n RoHS compliant
- n Metal Shell
- n High efficiency to 87%
- n 4:1 Wide range voltage input
- n Uses no electrolytic capacitors
- n Power density 0.94W/cm³
- n Under voltage lock out
- n 1.5kV input to output isolation
- n Operating temperature range -40 °C to 85 °C
- n Typical load regulation from 0.06%
- n Low noise
- n Current fold back



Order Code	Input Voltage(Vdc)	Input Current(mA)		Output Voltage(Vdc)	Output Current(mA)	%Eff. (Typ)	Cap. Load max.(uF)
		0% Load	100% Load				
RS12D05D6	9-36(4:1)	7	610	±5	±600	82.1	1500
RS12D12D6	9-36(4:1)	10	580	±12	±250	86.0	680
RS12D15D6	9-36(4:1)	12	580	±15	±200	87.2	470
RS12S03D6	9-36(4:1)	10	550	3.3	1520	77.7	1500
RS12S05D6	9-36(4:1)	7	610	5	1200	82.0	1500
RS12S12D6	9-36(4:1)	10	580	12	500	85.8	680
RS12S15D6	9-36(4:1)	12	580	15	400	87.3	470
RS48D05D6	18-75(4:1)	6	160	±5	±600	80.1	1500
RS48D12D6	18-75(4:1)	7	150	±12	±250	84.0	680
RS48D15D6	18-75(4:1)	7	150	±15	±200	83.9	470
RS48S03D6	18-75(4:1)	10	150	3.3	1520	76.2	1500
RS48S05D6	18-75(4:1)	6	160	5	1200	80.1	1500
RS48S12D6	18-75(4:1)	7	150	12	500	84.2	680
RS48S15D6	18-75(4:1)	7	150	15	400	84.0	470

INPUT CHARACTERISTICS

Parameter	Conditions	Min.	Typ.	Max.	Units
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ISOLATED 6W REGULATED SINGLE & DUAL OUTPUT DC/DC CONVERTERS

Input Voltage range	12V input types	9	12	36	Vdc
	48V input types	18	48	75	
Under voltage lock out	Turn on threshold 12V input types		8.5		Vdc
	Turn off threshold 12V input types		7.5		
	Turn on threshold 48V input types		16.7		
	Turn off threshold 48V input types		15.8		
Reflected ripple current	12V input types	Single output types		12	mA p-p
		Dual output types		4	
	48V input types	Single output types		9	
		Dual output types		6	

OUTPUT CHARACTERISTICS

Parameter	Conditions	Min.	Typ.	Max.	Units
Rated power	5V, 12V & 15V output types			6	W
	3.3V output types			5	
Voltage set point accuracy	Positive outputs			±2	%
	Negative outputs			±3	
Line regulation	Low line to high line	Positive outputs		0.002	%
		Negative outputs		0.09	
Load Regulation	10% total load to 100% total load	3V outputs		0.5	%
		5V positive outputs		0.3	
		12V & 15V positive outputs		0.06	
		All negative outputs		0.2	
Cross Regulation	% voltage change on negative output when positive load varies from 12.5% to 37.5% with negative load fixed at 50%	5V		5	%
		12V & 15V		2.5	
Start-up Time	3.3V & 5V output types	Single output types		2.5	mS
		Dual output types		25	
	12V output types	Single output types		4.6	
		Dual output types		11	
	15V output types	Single output types		5.5	
		Dual output types		14	

GENERAL CHARACTERISTICS

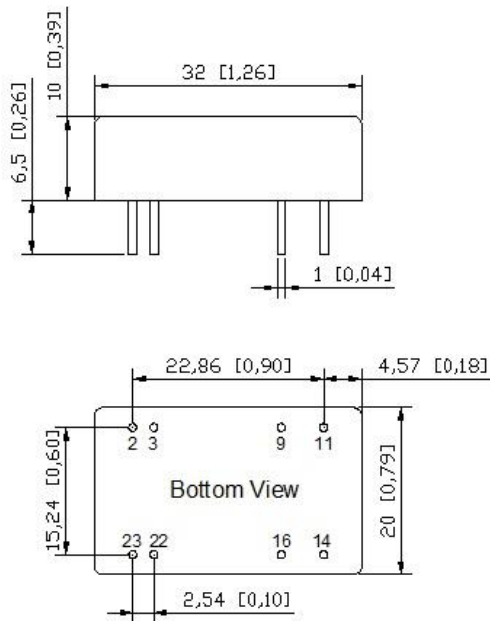
Isolation Voltage	1500VDC min.
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ISOLATED 6W REGULATED SINGLE & DUAL OUTPUT DC/DC CONVERTERS

Isolation Resistance	10 ⁸ Ohms min.
Isolation Capacitance	225pF typ.
Switching frequency	180 kHz
Operation Ambient Temperature Range	-40°C ~85°C
Derating	Above 71°C, Linearly to Zero Power at +100°C
Case Temperature	100°C max
Cooling	Natural Convection
Storage Temperature Range	-50°C to +125°C
Humidity	95%RH max. Non condensing
MTBF	MIL-STD-217F TBD
Dimensions	32.0x20.0x10.0mm (1.26x0.79x0.39 inches)
Case Material	Argentate Coated Copper With Non-Conductive Base
Weight	18.0g

MECHANICAL DIMENSIONS & PIN CONNECTION

All Dimensions In Millimeters [Inches]
 Tolerance Millimeters: .X=±1.0, .XX=±.25
 Inches: .XX=±.04, .XXX=±.010

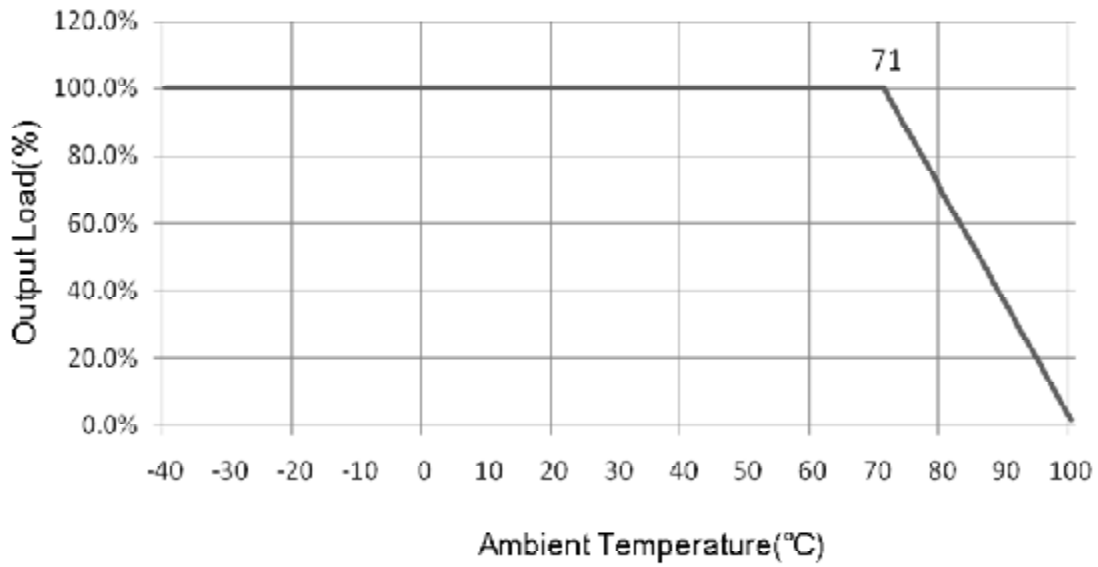


PIN CONNECTION			
Single Output		Dual Output	
Pin	Function	Pin	Function
2	-VIN	2	-VIN
3	-VIN	3	-VIN
9	NO PIN	9	0V
11	NA	11	-VOUT
14	+VOUT	14	+VOUT
16	-VOUT	16	0V
22	+VIN	22	+VIN
23	+VIN	23	+VIN

RS-6 Series Derating Curve

ISOLATED 6W REGULATED SINGLE & DUAL OUTPUT DC/DC CONVERTERS

Typical Derating Curve VS Ambient Temperature



NOTE

1. Measured From High Line to Low Line.
2. Measured From Full Load to min. Load.
3. Maximum case temperature under any operating condition should Not be exceeded 100°C.
4. The output ripple and noise is measured with 10uF tantalum and 1uF Ceramic capacitor across output.
5. All Specifications Typical At Nominal Line, Full Load, and 25°C Unless Otherwise Noted.