

SV28 SUPERVERTER (50/75/100/150/175) SERIES SPECIFICATIONS

		Min	Typical	Max	Units	Conditions
Absolute Maximum Ratings: Exceeding absolute maximum ratings may cause permanent damage or reduce reliability.						
PARAMETER	Input Voltage			40	Vdc	Continuous
	Transient Input Voltage			50	Vdc	100 msec max.
	Input/Output Isolation			1500	Vdc	
	Operating Case Temperature	-40		100	°C	
	Storage Temperature	-40		110	°C	
Electrical Specifications: Apply over the entire range of input voltage, output current, and temperature unless indicated.						
INPUT	Input Voltage	18	28	36	Vdc	
	Maximum Input Current	<i>See web site: www.roassoc.com</i>				
	Input Ripple Rejection		60		dB	@120 Hz
OUTPUT	Voltage Set Point			2	%	48V In, Full Load 25°C
	Load Regulation		0.05	0.2	%	0 to Full Load
	Line Regulation		0.01	0.1	%	Over Vin Range
	Voltage Drift w/Temperature					
	Ripple	<i>See web site: www.roassoc.com</i>				
	Current	<i>See Model Selection</i>				
	Current Limit Inception		115	130	% Iout max.	Vout = 90% Vout nominal, <i>See Output Characteristic Curves</i>
	Short Circuit Current			170	% Iout max	Vout = 250 mV, <i>See Output Characteristic Curves</i>
	Transient Response Peak Deviation (0.1A/μsec slew rate)		3		% Vout	50 to 75% or 50 to 25% Load Change
	Transient Response Settling Time (0.1A/μsec slew rate)		300		μsec	Vout within 1% Vout nominal
	Efficiency	<i>See Curves on Page 78 or web site: www.roassoc.com</i>				
ISOLATION	External Load Capacitance	0		10,000	μF	
	Input to Output Capacitance		2000		pF	
	Input to Output Resistance	10			M ohms	
	Input to Output		1500		Vdc	
	Input to Case		1500		Vdc	
MECHANICAL	Output to Case		500		Vdc	
	Weight		118 (4.2)		g (oz.)	
	Size		0.5x2.4x2.28		inches	<i>See Outline Drawing</i>
	Thermal Resistance Case to Ambient		6.6		°C/W	Case Temperature = 100°C
FEATURES	Trim Range	60		110	%Vout	
	Remote Sense Compensation			0.5	V	
	Over Voltage Clamp	<i>See web site: www.roassoc.com</i>				
	Over Temperature Shut-down		105		°C	Case Temperature (Not in 50W and 75W models)
	Logic On/Off					
	Logic Low: Von/off	0		1.2	V	@ Ion/off = 1 mA
	Ion/off			1.0	mA	@ Von/off = 0V
	Logic High: Von/off			15	V	@ Ion/off = 1 mA
	Ion/off			50	μA	@ Von/off = 15V
	Turn-on Time		8	35	msec	80% load, Vout within 1% Vout nominal