SENSITRON SEMICONDUCTOR

PRELIMINARY TECHNICAL DATA DATA SHEET SCP-5762, REV. -

70W DC-DC Converter Single Output, Isolated

Features:

- Wide Input Voltage Range
- Extended Operating Temperature
- Fixed Frequency Switching
- High Efficiency
- Low Ripple
- Thermal Shutdown (optional)

Packaging Options

- Hermetic
- Near-Hermetic (Moisture and Contamination Resistant, Gross Leak Tested)

Electrical Characteristics	Tc = 25 degC, unless	s specif	ied oth	erwise) .
PARAMETER	TEST CONDITIONS	MIN	TYP.	MAX	UNITS
Input Voltage	Tc = -55 to 125 degC Continuous, Transient, 1 s Other Transients	13	28 MIL-S ⁻	50 80 TD-704	V
Startup Threshold Voltage	Tc = -55 – 125 degC Inhibit = H			13	V
Input Undervoltage Turn OFF	Tc = -55 – 125 degC Inhibit = H	11			V
Input DC Current	Vin = 28V, Vout = 28V Nominal Load No Load Inhibited			2.9 TBD TBD	A
Input Ripple Current	Vin = 28V Nominal Load			200	mA
Input Reverse Current	Peak Value I ² t Value			150	A A²s
Hipot Voltage	Sea Level Input to Chassis Output to Chassis Input to Output		1000 500 1000		VDC
Total Output Power	Nominal, Tcase = 100 C Tcase = 125 C		70 TBD		W

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SCP-5762

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SEMICONDUCTOR

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PARAMETER	TEST CONDITIONS	MIN	TYP.	MAX	UNITS
	Tc = -55 – 125 C				
Output	Adjustable	23		29	V
Voltage Range	Line and Load		.1	.5	%
Regulation	B = 10kHz - 10MHz			100	mV
Ripple Voltage	Tc = 100 C			2.9	А
Nominal Current	Tc = 125C			TBD	А
	0 – 30 second		120		%
Overload Current	Step Load 50% to 100%		TBD		
Transient Response Time	Step Input 28V to 50V		TBD		
Inhibit Voltage	L = Power OFF	0		.5	V
_	H = Power ON	2.6			
Startup Delay	Vin = 28V		30		ms
Soft Start Ramp-up	Vin = 28V		5		ms
Efficiency	Vin = 28V, Pout = 70W, Tcase = 85 °C,		87		%
-	Output = 28 Volts				

Physical Characteristics

Temperature	
Operating	Tc = -55C to + 125C
Storage	Tc = -65C to +150C
Altitude	
Operating	-2,000 ft to 60,000ft
Cooling	
Power Dissipation	< 12W Continuous
Thermal Impedance	TBD
Case to Ambient	
Outline	3" x 1.5" x .45"

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