42 Watt Triple Output HYBRID

High Efficiency DC-DC CONVERTERS



- Completely self contained Thick Film Hybrid DC-DC Converter
- No external filter caps required
- Fully isolated design
- "Inhibit-not" function
- Power on soft start
- 250 kHz operation for low ripple and fast response time
- Built-in EMI input filter meets MIL-STD-461C requirements CE01, CE03, CS01, CS02 and CS06
- Short circuit and overvoltage protection
- Capability of external sync for switching frequencies
- Built-in test capability
 Specificati

Specifications

INPUT: 28 VDC nominal Range: 19 to 50 VDC ISOLATION: Input to case: 500 VDC

Input to output: 500 VDC Output to case: 100 VDC

ENVIRONMENT:

Storage temperature: -55°C to +150°C Shock: 50 G's, MIL-STD-810, M 516.5, P III (11mS pulse) Acceleration: 500 G's, MIL-STD-883, M 2001, C A1 (Y1 500G limit) Vibration: 30 G's, MIL-STD-883,

Vibration: 30 G's, MIL-STD-88 M2026, C 2H (32.3g random)

Grade M:

Full Power Output at $T_{case} = +85^{\circ}C$ Linearly derates to zero at $T_{case} = +115^{\circ}C$

Grade E:

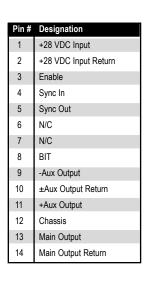
Full Power Output at $T_{case} = +125^{\circ}C$ Linearly derates to zero at $T_{case} = +135^{\circ}C$

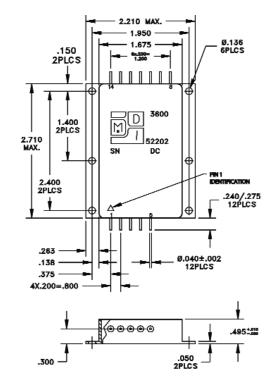
case	= + 155 C	
WEIGHT:	165 grams maximum	

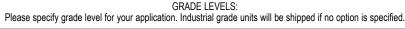
тм

S	eries	36	50	D	
TRIPLE OUTPUT DEVICES		3600 (42W)			
PARAMET	ER CONDITION	MIN	TYP	MAX	
Output voltage	+I _{out} = -I _{out}	+4.9 +15.1 -15.1	+15.5	+15.9	
Output current	V _{in min} — V _{in max}	150mA ±75mA		4A ±750mA	
Efficiency	Pout = max rated load	83%	85%	—	
Line regulation	Pout = max rated load	_	5mV	15mV	
	V _{in min} — V _{in max}	—	±125m\	′ ±200mV	
Load	P = min to F.L.	-	50mV	75mV	
regulation	out	_	±500m\	±700mV	
Output ripple	F.L. BW 2 MHz mV _{pp}	—	25	70	
		—	75	125	

- Model 3600 is a high efficiency cross regulated triple output DC-DC converter that incorporates a built-in MIL-STD-461 EMI filter.
- High efficiency and excellent cross regulation are achieved by using a planar power transformer and GaAs rectifiers. A sync input and sync output are also provided.
- Other input/output voltages available on special order







Industrial Grade Units M +85°C military

E +125°C military

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