

ODM10-**SC Series

10 Watt MEDICAL DC/DC Power Supply



4:1 Wide input range VDC
Efficiency 85%~ 88%
5 KVAC Isolation
Wide operating temperature from -40°C to +105°C
EMI class A without external circuit
No minimum load required
Medical safety meets 2xMOPP per 3rd Edition of IEC/EN 60601-1
Low leakage current; 5KVAC isolation
DIP 24 package
Available Inputs Voltage (nominal):
24VDC Nom (DC 9~36V)
48 VDC Nom (DC 18 ~ 75V)
2 Years Warranty

RoHS

		UNIT	ODM10-**SC24	ODM10-**SC48		
INPUT	Nom Voltage (Range)	V	DC 24V (9~36)	DC 48V (18~75)		
	Current Typ. @no Load	mA	6	6		
	Start-up Time	ms	Nom. Vin at 100% load Typ. 30ms			
	Voltage Lockout	24VDC 48VDC	Typ. 7.5VDC Typ. 16VDC			
	Voltage Surge	24VDC 48VDC	Max. 50VDC Max. 100VDC			
	Start up Voltage (0% ~100%)	24VDC 48VDC	9 VDC 18VDC			
			ODM10-05SC24	ODM10-12SC24	ODM10-15SC24	ODM10-24SC24
OUTPUT	Nominal Voltage	VDC	5	12	15	24
	Trim Range					
	Current	A	2.2	.916	.733	.458
	Total Pwr	W	11	11	11	11
	Efficiency	%	85.5	87.5	88.00	87.5
	Line Regulation	%	.02	0.2	0.2	.02
	Load Regulation	%	.02	0.2	0.2	.02
	Operating Frequency	KHZ	300	300	300	350
	Ripple Noise 20MHZ BW at Vin range with a 1µF/50V X7R MLCC	mVp-p	30	40	40	50
	Cooling		Convection			
ISOLATION	Voltage		60 sec. 1mA Min. 5 KVDC			
	Resistance		Min. 1000 MΩ			
	Capacitance		Max. 15 pF			
	Over-load Protection		Typ. 150%			
		Over-Voltage Protection	5VDC 12VDC	Min. 5.6 Min. 13.4		
				Max. 8.0 Max. 19.2		



	15VDC 24VDC	Min. 16.8 Min. 26.9	Max. 22.5 Max. 31.2
Environment	Operating temp	-40 ~ +105°C	
	Storage	-55 ~ +125°C	
	Vibration	10 ~ 55Hz at 1G, 3 minutes period, 30 minutes along X, Y and Z axis	
Dimension	WxHxL mm/g	25.4 x 25.4 x 10 / 17	
	Case Material	Nickel plated metal with FR-4 base	
	Potting Material	Silicone	

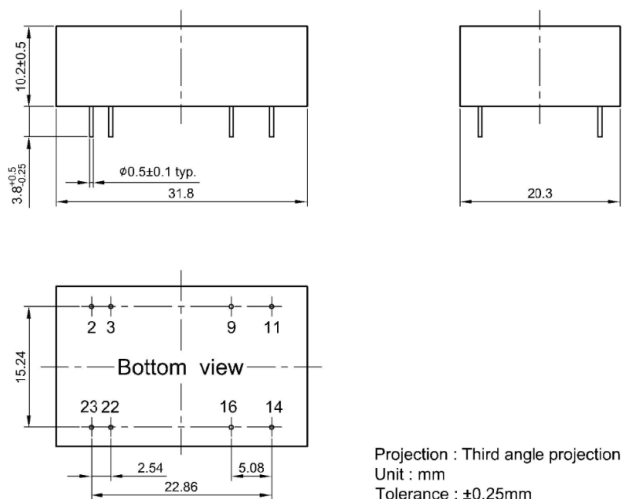
		ODM10-05SC48	ODM10-12SC48	ODM10-15SC48	ODM10-24SC48	
OUTPUT	Nominal Voltage VDC	5	12	15	24	
	Trim range VDC					
	Current A	2.2	.916	.733	.458	
	Total Pwr W	11	11	11	11	
	Efficiency %	85.5	87.5	87.50	87.5	
	Line Regulation %	.02	0.2	0.2	.02	
	Load Regulation %	.02	0.2	0.2	.02	
	Operating Frequency KHZ	300	300	300	350	
	Ripple Noise mVp-p 20MHZ	30	40	40	50	
	Cooling	Convection				
ISOLATION	Voltage	60 sec. 1mA Min. 5 KVDC				
	Resistance	Min. 1000 MΩ				
	Capacitance	Max. 15 pF				
	Over-Voltage Protection 5VDC 12VDC 15VDC 24VDC			Min. 5.6 Min. 13.4 Min. 16.8 Min. 26.9	Max. 8.0 Max. 19.2 Max. 22.5 Max. 31.2	
	Over-load Protection	Typ. 150%				
Environment	Operating temp	-40 ~ +105°C				
	Storage	-55 ~ +125°C				
	Vibration	Mil-STD 202G IEC68-2-6				
Dimension	WxHxL mm/g	31.8 x 20.30 x 10.2 / 13				
	Case Material	plastic				
	Potting Material	Silicone				

	EMI	EN55011	Class B
	ESD	EN61000-4-2, Air±15Kv; Contact±8kV	Perf. Criteria A
Safety	Radiated immunity ⁽¹⁾	EN61000-4-3	Criteria A
	Fast transient ⁽¹⁾	EN61000-4-4, ±2kV	Criteria A
	Surge ⁽¹⁾	EN61000-4-5, ±2kV	Criteria A
	Conducted immunity ⁽¹⁾	EN61000-4-6	Criteria A
	Magnetic field immunity	EN61000-4-8	Criteria A
	Medical safety 2 X MOPP per 3rd edition of IEC/EN 60601-1		



EMI class A without external circuit.
 Test with E-CAP 220uF/100V at input terminal.

DIMENSIONAL DIAGRAM



Pin	Single
2, 3	-Vin
9	No pin
11	No pin
14	+Vout
16	-Vout
22, 23	+Vin

OUTPUT DERATING CURVE AND RECCOMENDED MOUNTING DIAGRAM

