



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



		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	mVp-p	30	40	40	50		
	20MHZ BW at Vin range with a 1µF/50V X7R MLCC							
ISOLATION	Cooling		Convection					
	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 Potting Material		Nickel plated metal with FR-4 base 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	30	40	40	50
		20MHZ				
	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 Potting Material		plastic Silicone			

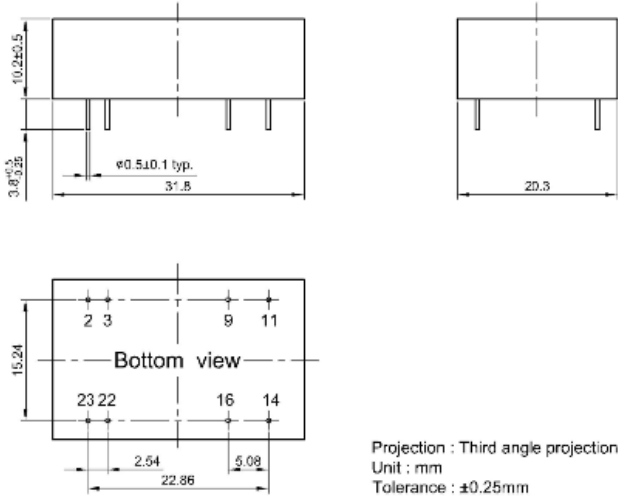
	EMI	EN55011	Class B
	ESD	EN61000-4-2, Air±15Kv; Contact±8kV	Perf. Criteria A
Safety	Radiated immunity ⁽¹⁾	EN61000-4-3	Criteria A
	Fast transient ⁽¹⁾	EN61000-4-4, ±2kV	Criteria A
	Surge ⁽¹⁾	EN61000-4-5, ±2kV	Criteria A
	Conducted immunity ⁽¹⁾	EN61000-4-6	Criteria A
	Magnetic field immunity	EN61000-4-8	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

