



ODC15 SC/WC

30W DC/DC



Features

- 4:1 Wide input range VDC
- Compact size 1x1" package
- Efficiency 85%~90%
- Wide operating temperature from -40°C to +105°C
- EMI class A without external circuit
- Regulated and low ripple noise is required
- No minimum load required
- Meet EN62368-1
- Available Inputs Voltage (nominal):
- 24VDC Nom (DC 9~36V)
- 48 VDC Nom (DC 18 ~ 75V)
- ODC15-22WC -22: 12V, 12V
- ODC15-23WC -23: 15V, 15V



MODEL/CHANNEL		Unit	ODC15-03WC24	ODC15-05WC24	ODC15-12SC24	ODC15-15SC24	ODC15-24WC24	
OUTPUT	Nominal Voltage	V	3.3	5	12	15	24	
	Current	A	4	3	1.25	1	.625	
	Total Power	W	13.2	15	15	15	15	
	Efficiency Typ.	%	85	88	88.5	89	89.5	
	Line Regulations	%	0.2	0.2	0.2	.02	.02	
	Operating Frequency	KHZ	400		350			
	Load Regulations	%			0.5			
	Ripple and Noise	24VDC 48VDC	mVp-p			60 100		
		Unit	ODC15-SC/WC24		ODC15-SC/WC48			
INPUT	Nominal Voltage	V	DC 24V(9~36)		DC 48V(18~75)			
	Current Typ	mA	7		5			
	Voltage, Frequency	V	60 sec.; typ. 1.6KVDC					
	Current Typ.	A	Min. 1000 MΩ					
	Voltage Surge	24VDC 48VDC	VDC	Typ. 170% Typ. 190%				
	Input Voltage	-	Typ. 1200pF					
	Start Up Time	-	Nom. Vin at 100% load Typ. 20ms-Max. 25ms					
	Remote On/Off	-	Open or 3.5~15VDC Short or 0~1.2VDC Input current (remote off mode) typ. 2mA					
	Voltage Surge	-	Max. 50VDC Max. 100VDC					
	Voltage Lockdown	-	Typ. 7.5VDC Typ. 16VDC					

0.5





ETA-USA

The Power Professionals

ODC15

MODEL/CHANNEL		Unit	ODC15-03SC48	ODC15-05SC48	ODC15-12SC48	ODC15-15SC48	ODC15-24SC48
OUTPUT	Nominal Voltage	V	3.3	5	12	15	24
	Current	A	4	3	1.25	1	.625
	Total Power	W	13.2	15	15	15	15
	Efficiency Typ.	%	85	88	88.5	89	89.5
	Line Regulations	%	0.2	0.2	0.2	.02	.02
	Operating Frequency	KHZ	400	350			
	Trim Range	VDC	+/-10%				
	Load Regulations	%	0.5				
	Ripple and Noise	24VDC 48VDC	mVp-p	60 100			

MODEL/CHANNEL		Unit	ODC15-12WC24	ODC15-15WC24	ODC15-22WC48	ODC15-23SC48
OUTPUT	Nominal Voltage	V	+/-12	+/-15	+/-12	+/-15
	Current	A	+/- 0.625	+/-0.5	+/- 0.625	+/-0.5
	Efficiency Typ.	%	87	89	87	89
	Load Regulations	%	0.5			
	Line Regulations	%	1			
	Trim Range	VDC	+/-10%			
	Operating Frequency	KHZ	350			
	Ripple and Noise	24VDC 48VDC	mVp-p	60 100		

MODEL/CHANNEL		Unit	ODC15-SC/WC24	ODC15-SC/WC48
Function	Overload Protection	24VDC 48VDC	A	Typ. 170% Typ. 190%
	Voltage	-	-	60 sec. typ. 1.6KVDC
	Cooling/O.T.P	-	-	Convection
	Resistance	-	-	Min. 1000 MΩ
	Capacitance	-	-	Typ. 1200μF
Environment	Operating temp. & Hum.	-	-	-40 ~ +105°C
	Storage temp. & Hum.	-	-	-55 ~ +125°C
	Vibration	24 & 48VDC SC WC	-	10 ~ 55Hz at 1G, 3 minutes period, 30 minutes along X, Y, and Z axis Mil-STD 202G
Dimension	Size(WxLxH) / Weight	mm/g	25.4 x 25.4 x 10 / 17	
	Case Material Put Material	-	Nickel plated metal with FR-4 base Silicone	
	Emission	-	ESD EN61000-4-2, Air±8Kv; Perf. Criteria A Contact±6kV Radiated immunity EN61000-4-3 Criteria A Fast transient EN61000-4-4, ±2kV Criteria A Surge EN61000-4-5, ±2kV Criteria A Conducted immunity EN61000-4-6 Criteria A Magnetic field immunity EN61000-4-8 Criteria A Meet EN62368-1	



ETA-USA

16170 Vineyard Blvd. Suite 180 Morgan Hill, CA 95037 <http://www.eta-usa.com>
Toll-free (US only): 800-ETA-POWR (800-382-7697) Telephone: 408 778-2793 FAX: 408-779-2753

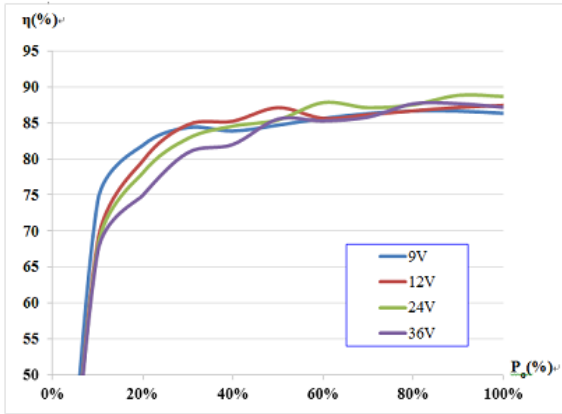
©2014 ETA-USA All Rights Reserved

ETA-USA reserves the right to make changes to the products and specifications without prior notice. Please contact the factory for latest information.

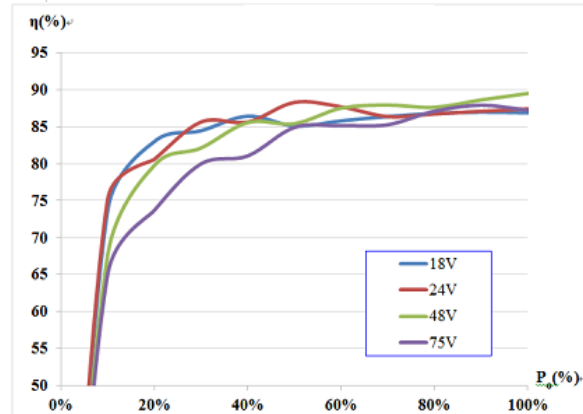


Derating Curve

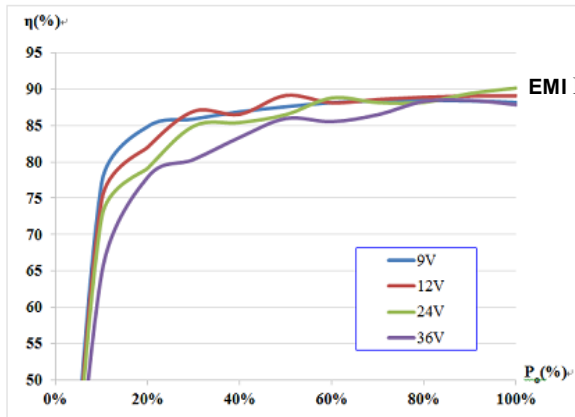
ODC15-15SC24



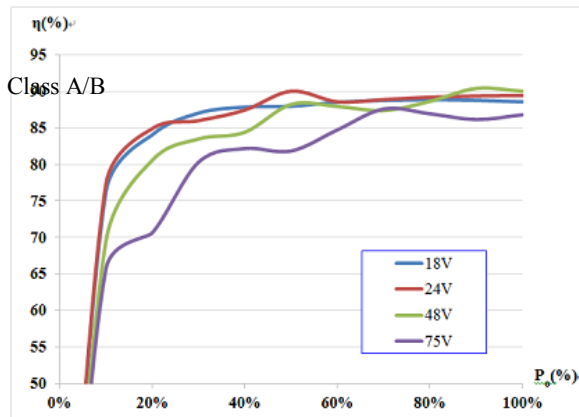
ODC15-15SC48



ODC15-15SC24



ODC15-15SC48

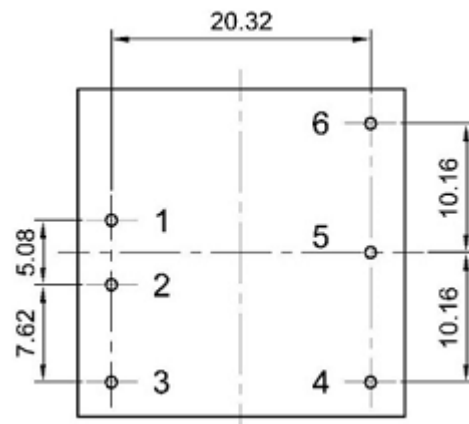


EMI EN55032 Class A/B

Pin Output

	SC Series Single Output	WC Series Dual Output
Pin 1	+Vin	+Vin
Pin 2	-Vin	-Vin
Pin 3	CTRL	CTRL
Pin 4	-Vout	-Vout
Pin 5	Trim	Common
Pin 6	+Vout	+Vout

	SC Series Single Output	WC Series Dual Output
Pin 1	+Vin	+Vin
Pin 2	-Vin	-Vin
Pin 3	CTRL	CTRL
Pin 4	-Vout	-Vout
Pin 5	Trim	Common
Pin 6	+Vout	+Vout

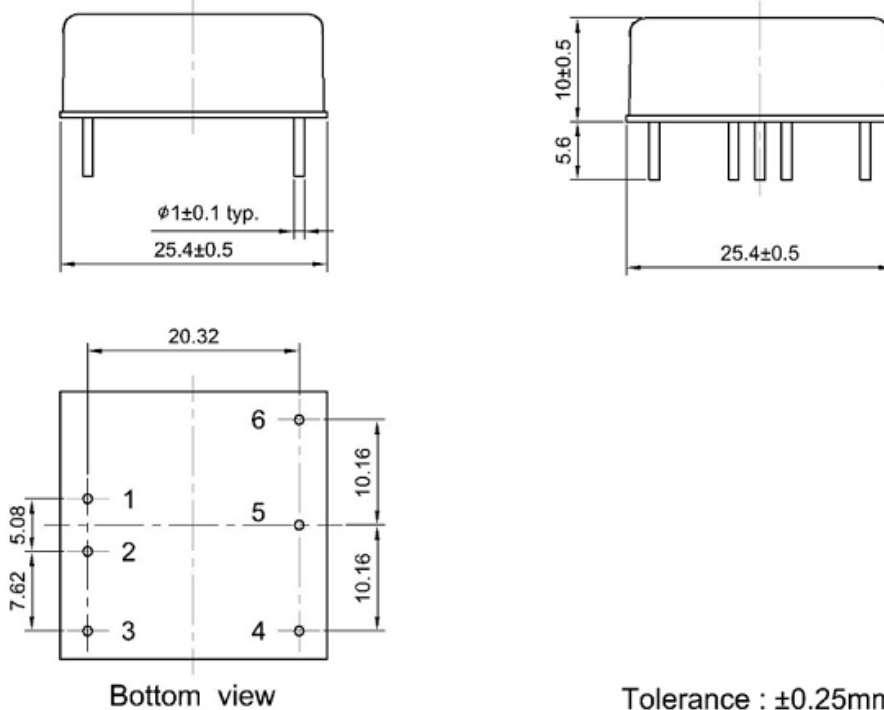




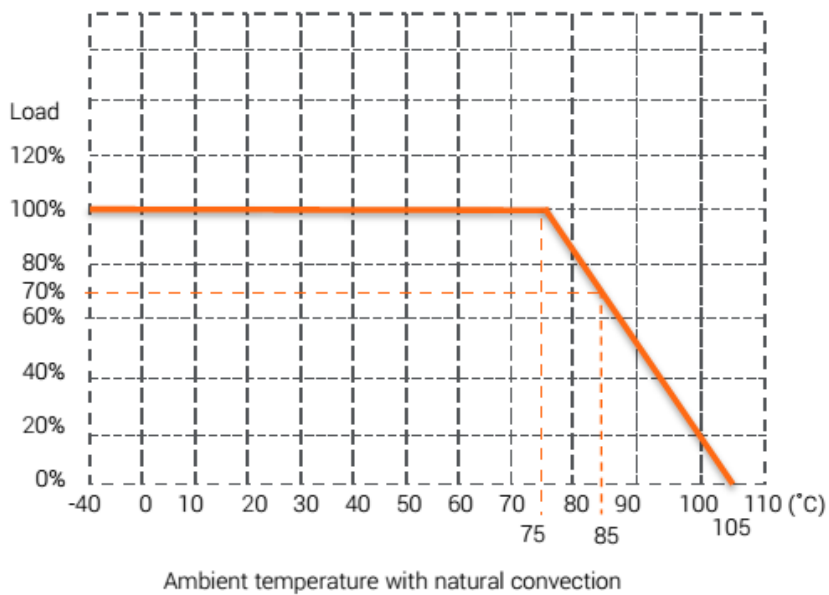
ETA-USA

The Power Professionals

Dimensional Drawing(mm)



Output Derating Curve



ETA-USA

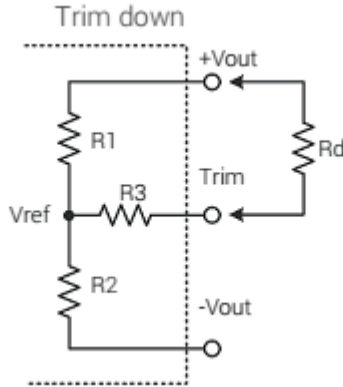
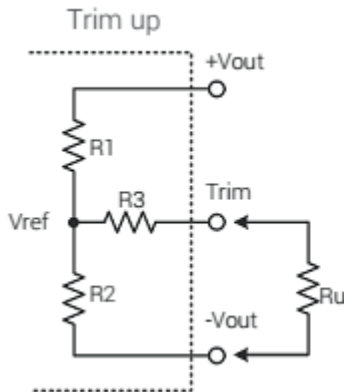
16170 Vineyard Blvd. Suite 180 Morgan Hill, CA 95037 <http://www.eta-usa.com>
Toll-free (US only): 800-ETA-POWR (800-382-7697) Telephone: 408 778-2793 FAX: 408-779-2753

©2014 ETA-USA All Rights Reserved

ETA-USA reserves the right to make changes to the products and specifications without prior notice. Please contact the factory for latest information.



External Output

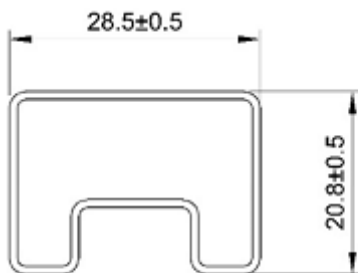


$$R_u = \frac{aR_2}{R_2 - a} - R_3 \quad a = \frac{V_{ref}}{V'_0 - V_{ref}} \cdot R_1$$

$$R_d = \frac{bR_1}{R_1 - b} - R_3 \quad b = \frac{V'_0 - V_{ref}}{V_{ref}} \cdot R_2$$

Model	R1	R2	R3	Vref
ODC15-03SC**	16.6kΩ	10kΩ	52.3kΩ	1.24 V
ODC15-05SC**	10kΩ	10kΩ	35.7kΩ	2.5 V
ODC15-12SC**	38.1kΩ	10kΩ	48.7kΩ	2.5 V
ODC15-15SC**	50.1kΩ	10kΩ	51kΩ	2.5 V
ODC15-24SC**	86.32kΩ	10kΩ	73.2kΩ	2.5 V

Packaging (In tubes of 8)



UNIT:mm
 1 Tube = 8 pcs
 Length:260±2mm

