

■ Features

- DIP 2"x1" package with industry standard pinout
- 8:1(9~75Vdc) ultra-wide input range
- Operating temperature range -40 ~ +90°C
- No minimum load required
- Comply to BS EN/EN55032 radiated Class A without additional components
- High efficiency up to 88%
- Protections: Short circuit (Continuous) / Overload / Over voltage / UVLO
- 3KVdc I/O isolation
- Remote ON/OFF control (By request)
- 3 years warranty

■ Applications

- Telecom/datacom system
- Wireless network
- Industrial control facility
- Instrument
- Analyzer
- Detector
- Data switch

■ GTIN CODE

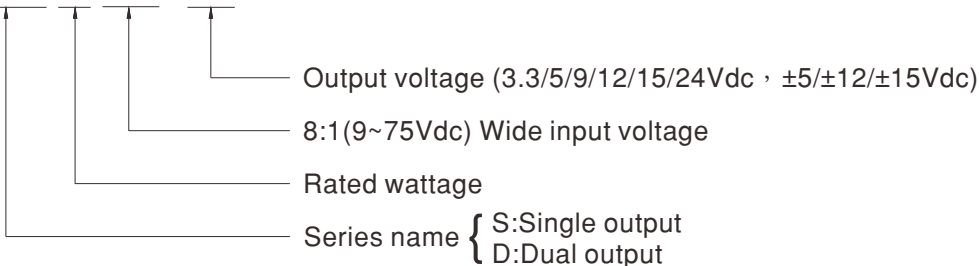
MW Search: <https://www.meanwell.com/serviceGTIN.aspx>

■ Description

SKE10W8 and DKE10W8 series are 10W isolated and regulated module type DC-DC converter with DIP 2"x1" package. It features international standard pins, a high efficiency up to 88%, wide working temperature range -40~+90°C , 3KVdc I/P-O/P isolation voltage, compliance to BS EN/EN55032 radiated Class A without additional components, continuous-mode short circuit, overload, over voltage, input under voltage protection etc. The models account for 9~75Vdc 8:1 ultra-wide input range, and various output voltage, 3.3V/5V/9V/12V/15V/24V for single output and ±5V/±12V/±15V for dual outputs, which are suitable for all kinds of systems, such as industrial control, telecommunication field, distributed power architecture, and so on.

■ Model Encoding

SKE10 W8 -12





10W 2"x1" Package 8:1 Ultra-Wide Input DC-DC Regulated Converter

SKE10W8 & DKE10W8 series

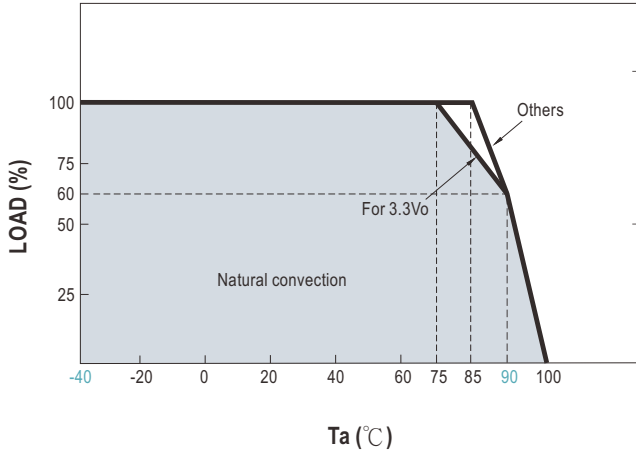
MODEL SELECTION TABLE

ORDER NO.	INPUT			OUTPUT		EFFICIENCY (TYP.)	CAPACITOR LOAD (MAX.)
	INPUT VOLTAGE (RANGE)	INPUT CURRENT		OUTPUT VOLTAGE	OUTPUT CURRENT		
		NO LOAD	FULL LOAD				
SKE10W8-03	Nominal 12V, 24V, 36V, 48V, 72V (9 ~ 75V)	10mA	503mA	3.3V	0~3000mA	82%	680μF
SKE10W8-05		10mA	484mA	5V	0~2000mA	85%	680μF
SKE10W8-09		10mA	485mA	9V	0~1100mA	85%	470μF
SKE10W8-12		10mA	478mA	12V	0~833mA	87%	330μF
SKE10W8-15		10mA	473mA	15V	0~666mA	88%	220μF
SKE10W8-24		10mA	478mA	24V	0~417mA	87%	100μF
DKE10W8-05		10mA	484mA	±5V	±0~1000mA	85%	*330μF
DKE10W8-12		10mA	478mA	±12V	±0~417mA	87%	*150μF
DKE10W8-15		10mA	473mA	±15V	±0~333mA	86%	*100μF

* For each output

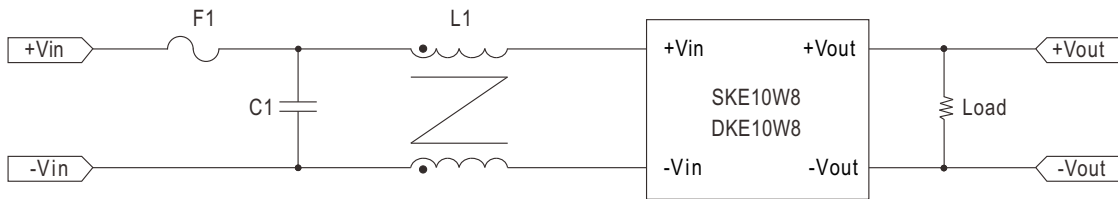
SPECIFICATION			
INPUT			
VOLTAGE RANGE	9~75Vdc		
SURGE VOLTAGE (100ms max.)	100Vdc		
FILTER	Pi network		
PROTECTION	Fuse recommended 3A Slow-Blow		
OUTPUT			
VOLTAGE ACCURACY	±2% max.		
RATED POWER	10W		
RIPPLE & NOISE	Note.2	50mVp-p max.	
LINE REGULATION	Note.3	±0.5%	
LOAD REGULATION	Note.4	±1% for 3.3Vdc & 5Vdc output, ±0.5% for other output	
CROSS REGULATION	±5% @ 25% ~ 100% load only dual output		
SWITCHING FREQUENCY (Typ.)	300KHz (PWM)		
PROTECTION			
SHORT CIRCUIT	Continuous, automatic recovery		
OVERLOAD	110 ~ 230%		
	Protection type : Recovers automatically after fault condition is removed		
OVER VOLTAGE	Clamp by TVS diodes		
UNDER VOLTAGE LOCKOUT (Typ.)	Start-up voltage: 8.8Vdc		
	Shutdown voltage: 8Vdc		
FUNCTION			
REMOTE CONTROL (By request)	Power ON: R.C. ~ -Vin >4~30Vdc or open circuit ; Power OFF: R.C. ~ -Vin <1Vdc or short		
ENVIRONMENT			
COOLING	Free-air convection		
WORKING TEMP.	-40 ~ +90°C (Refer to "Derating Curve")		
CASE TEMPERATURE	+110°C max.		
WORKING HUMIDITY	5% ~ 95% RH non-condensing		
STORAGE TEMP., HUMIDITY	-55 ~ +125°C, 10 ~ 95% RH non-condensing		
TEMP. COEFFICIENT	±0.03% / °C (0 ~ 85°C)		
SOLDERING TEMPERATURE	1.5mm from case of 3 ~ 5 sec./265°C max.		
VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes		
SAFETY & EMC (Note.5)			
SAFETY STANDARDS	EAC TP TC 020/2011 approved		
WITHSTAND VOLTAGE	I/P-O/P:3KVdc		
ISOLATION RESISTANCE	I/P-O/P:1000M Ohms / 500VDC / 25°C / 70% RH		
ISOLATION CAPACITANCE (Typ.)	1000pF		
EMC EMISSION	Parameter	Standard	Test Level / Note
	Conducted	BS EN/EN55032(CISPR32)	N/A
	Radiated	BS EN/EN55032(CISPR32)	Class A without additional components Class B with additional components
EMC IMMUNITY	Parameter	Standard	Test Level / Note
	ESD	BS EN/EN61000-4-2	Level 3, ±8KV air, Level 2, ±4KV contact
	Radiated Susceptibility	BS EN/EN61000-4-3	Level 2, 3V/m
	EFT/Bursts	BS EN/EN61000-4-4	Level 1, 0.5KV
	Surge	BS EN/EN61000-4-5	Level 2, ±0.5KV Line-Line
	Conducted	BS EN/EN61000-4-6	Level 2, 3V(e.m.f.)
Magnetic field immunity	BS EN/EN61000-4-8	Level 1, 1A/m	
OTHERS			
MTBF	>880Khrs MIL-HDBK-217F(25°C)		
DIMENSION (L*W*H)	50.8*25.4*11.2mm (2*1*0.44 inch)		
CASE MATERIAL	Six-side shielded case		
PACKING	29g ; 10pcs/per tube, 400pcs/40 tube/per carton		
NOTE			
1.All parameters are specified at normal input (24Vdc), rated load, 25°C 70% RH ambient. 2.Ripple & noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1µf & 47µf capacitor. 3.Line regulation is measured from low line to high line at rated load. 4.Load regulation is measured from 0% to 100% rated load. 5.The final equipment must be re-confirm that it still meet EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies."(as available on http://www.meanwell.com) ※ Product Liability Disclaimer : For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx			

Derating Curve



EMC Suggestion Circuit

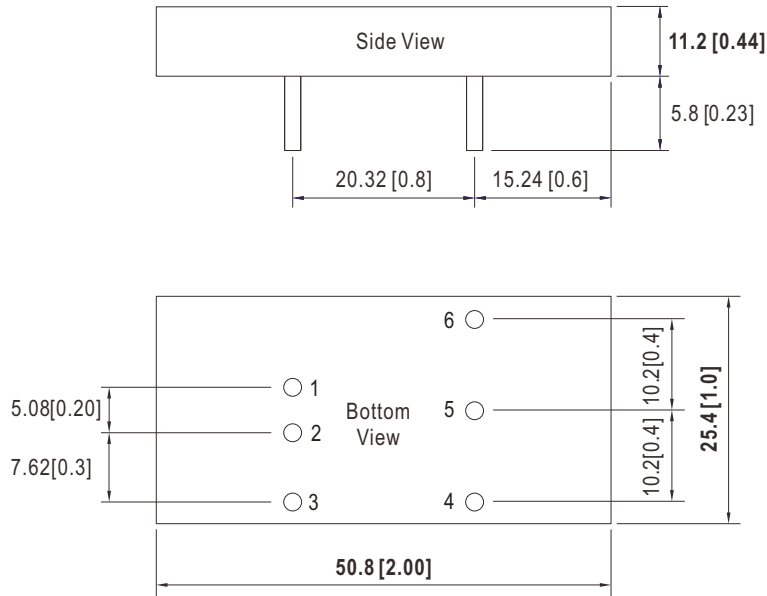
※ Required external components to meet BS EN/EN55032 radiated Class B emission as below:



Model No.	BS EN/EN55032 radiated Class B		
	F1	C1	L1
SKE10W8 DKE10W8	Suggest 3A Slow-Blow Type	2.2μF/100V MLCC	500μH Common Choke

Mechanical Specification

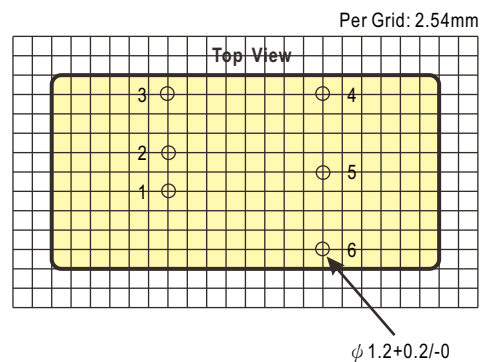
- All dimensions in mm(inch)
- Tolerance: $x.x \pm 0.5\text{mm}$ ($x.xx \pm 0.02"$)
 $x.xx \pm 0.25\text{mm}$ ($x.xxx \pm 0.010"$)
- Pin tolerance: $\phi 1 \pm 0.1\text{mm}$



Pin Assignment

Pin-Out		
Pin No.	SKE10W8 (Single output)	DKE10W8 (Dual output)
1	+Vin	+Vin
2	-Vin	-Vin
3	R.C.(By request)	
4	-Vout	-Vout
5	N.P.	Common
6	+Vout	+Vout

*N.P.: No pin



■ Packing

Standard Tube Packing	MPQ Per Tube (PCS)	One Tube G.W.	Max. Q'TY/ Carton(PCS)	One Carton G.W.
<p>Unit : mm</p> <p>Product</p> <p>Tube Nails</p> <p>289</p> <p>54</p> <p>22.7</p> <p>7</p> <p>Tube pattern</p> <p>CARTON L620 x W230 x H230</p>	10	378g	400	15.92Kg

■ Installation Manual

Please refer to : <http://www.meanwell.com/manual.html>