

8 Watts AC/DC Power Modules

FEATURES

- PCB Mount Switching Power Modules
- Fully Encapsulated Plastic Case
- 90-264 VAC, 47-440Hz Universal Input
- Single and Dual Outputs
- Regulated Output
- Low Ripple and Noise
- Class II Construction
- 0.3W Maximum No-Lead
- Compact Size
- Optional Screw Terminal
- CE, UL, cUL Approvals



MODELS LIST

SINGLE OUTPUT					
Product No.	TEC8-S3.3	TEC8-S3.8	TEC8-S5	TEC8-S8	TEC8-S9
Output Voltage (VDC)	3.3 VDC	3.8 VDC	5 VDC	8 VDC	9 VDC
Max. Output Current (mA)	2000mA	2100mA	1600mA	1000mA	888mA
Line Regulation (LL-HL)	±0.2%	±0.2%	±0.2%	±0.2%	±0.2%
Load Regulation (10-100%)	±1%	±1%	±1%	±1%	±1%
Max Capacitive Load	26000µF	25000µF	6000µF	2500µF	2300µF

SINGLE OUTPUT				
Product No.	TEC8-S12	TEC8-S14	TEC8-S15	TEC8-S24
Output Voltage (VDC)	12 VDC	14 VDC	15 VDC	24 VDC
Max. Output Current (mA)	666mA	571mA	533mA	335mA
Line Regulation (LL-HL)	±0.2%	±0.2%	±0.2%	±0.2%
Load Regulation (10-100%)	±0.5%	±0.5%	±0.5%	±0.5%
Max Capacitive Load	1050µF	500µF	440µF	180µF

DUAL OUTPUTS								
Product No.	TEC8-D0533		TEC8-D0805		TEC8-D1205		TEC8-D1275	
	Output 1	Output 2	Output 1	Output 2	Output 1	Output 2	Output 1	Output 2
Output Voltage (VDC)	5 VDC	3.3 VDC	8 VDC	5 VDC	12 VDC	5 VDC	12 VDC	7.5 VDC
Voltage Accuracy	±2%	±15%	±2%	±5%	±2%	±5%	±2%	±5%
Max. Output Current (mA)	1600mA	310mA	1000mA	150mA	666mA	200mA	560mA	250mA
Line Regulation (LL-HL)	±0.2%	±3%	±0.2%	±3%	±0.2%	±3%	±0.2%	±3%
Load Regulation (10-100%)	±0.5%	±5%	±0.5%	±5%	±0.5%	±5%	±0.5%	±5%
Max Capacitive Load	1200µF	1000µF	800µF	3800µF	260µF	3800µF	260µF	4000µF

All specifications typical at nominal input voltage, full load and +25°C after warm-up time unless otherwise noted.

INPUT SPECIFICATIONS

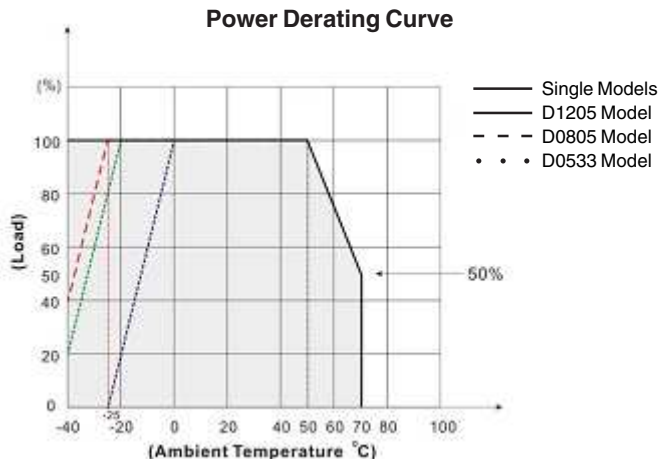
Input Voltage Range	90~305 VAC / 120~430 VDC
Input Frequency	47~440Hz
Input Current, Single	180mA max. @ 115 VAC
	110mA max. @ 230 VAC
Dual	200mA max. @ 115 VAC
	125mA max. @ 230 VAC
Inrush Current	25A max. @ 115 VAC
	45A max. @ 230 VAC
Leakage Current	0.25mA max.
Recommended External Fuse	2.0A slow blow type

OUTPUT SPECIFICATIONS

Output Wattage, Single	8W max.
Dual	9W max.
Output Voltage	See tables
Minimum Load, Single	Not required
Dual	25%
Ripple*, Single	3.3~15V: 100mV max.
	24V:150mV max.
Dual	3.3~24V: 100mV max.
Noise*, Single	3.3~15V: 150mV max.
	24V: 200mV max.
Dual	3.3~24V: 150mV max.
Hold-up Time	10ms min.
Switching Frequency	132±8KHz
Overpower Protection	Hiccup mode (automatic-recovery)
Overvoltage Protection	Zener diode clamp
Short-circuit Protection	Hiccup mode, indefinite (automatic-recovery)
Input-Output Isolation	3000 VAC

*Ripple & Noise are measured at 20MHz of bandwidth with 0.1µF & 47µF capacitors in parallel.

DERATING



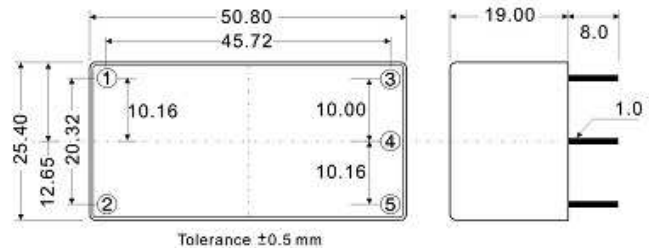
GENERAL SPECIFICATIONS

Efficiency	81% max.
Operating Temperature	40°C to +70°C
Derating	See Power Derating Curve
Cooling	Free air convection
Storage Temperature	-40°C to +125°C
Temperature Coefficient	±0.02%/°C
Relative Humidity	95% RH
MTBF	350K hrs minimum at full load, 25°C ambient, calculated per MIL-HDBK-217F
Dimensions (LxWxH)	2.0 x 1.0 x 0.75 inches (50.8 x 25.4 x 19.0mm)
Case Material:	Plastic resin with fiberglass case, UL 94V-0 rated
Weight	35g

EMC & SAFETY STANDARDS

Safety Approvals	CE, UL, cUL
EMI	EN55022, Class B (Conducted & Radiated Emission)
EMS	EN55024 (Noise Immunity)

MECHANICAL DRAWING



PIN CHART

PIN NO.	SINGLE	DUAL
1	AC IN (L)	AC IN (L)
2	AC IN (N)	AC IN (N)
3	+DC OUT	+DC OUT
4	-DC OUT	-DC OUT
5	NO PIN	VR