



**FEATURES:**

- AC-DC LED Driver
- Input range 90-277VAC/47-440Hz
- High Efficiency up to 91%
- Operating temperature -40 to 85°C
- Over Voltage Protection
- Waterproof Case rated IP68
- Power Factor Correction
- SCP, Over Current Protection

**Models**  
**Single output**



Model	Max Output Power (W) *	Output Voltage Range (V)	Output Current (A)	Input Voltage (VAC/Hz)	Input Voltage (VDC)	Efficiency (%)
AMER150-50300AZ	150	36-50	3	90-277/47-440	120-390	91
AMER150-36420AZ	150	24-36	4.16	90-277/47-440	120-390	90
AMER150-24630AZ	151.2	12-24	6.3	90-277/47-440	120-390	90

\*Exceeding the maximum output power will permanently damage the converter

NOTE: All specifications in this datasheet are measured at an ambient temperature of 25°C, humidity<75%, nominal input voltage and at rated output load unless otherwise specified.

**Input Specifications**

Parameters	Conditions	Typical	Maximum	Units
Inrush current <2ms	115VAC	50		A
	230VAC	75		
Leakage current	115VAC	0.75		mA
	230VAC	1		
AC current	115VAC	2.2		A
	230VAC	0.7		
Power Factor	115VAC		0.98	
	230VAC		0.94	
External fuse			250V/3.5A	
Start up time		500		ms
Surge voltage	2sec		440	V

**Output Specifications**

Parameters	Conditions	Typical	Maximum	Units
Current accuracy		±3		%
Line regulation	LL-HL	±1		%
Load regulation	0-100% load	±3		%
Ripple & Noise *	20MHz Bandwidth	75		mV p-p
Hold-up time (min)		45		ms
Current adjustment range		100-0		%

\* Tested with 0.1µF (M/C) or (C/C) and 47µF (E/C) parallel capacitors at the end.

**Isolation Specifications**

Parameters	Conditions	Typical	Rated	Units
Tested I/O voltage	3sec		3000	VAC
Isolation Resistance	500VDC	>1000		MΩ
Isolation Capacitance		1000		pF

**General Specifications**

Parameters	Conditions	Typical	Maximum	Units
Switching frequency		100		KHz
Over current protection		95-110% of Iout		
Over voltage protection		110% of Vout		

### General Specifications (continued)

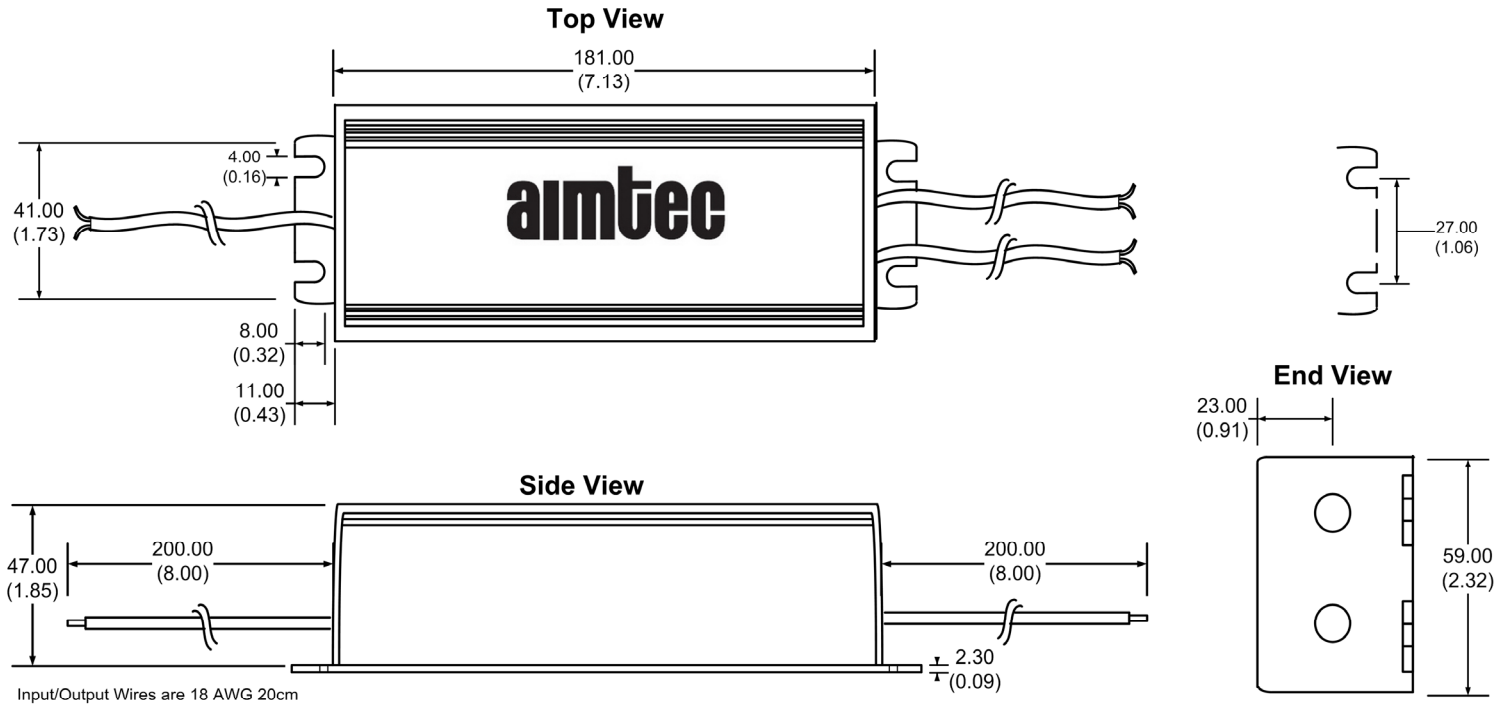
Parameters	Conditions	Typical	Maximum	Units
Short circuit protection		Continuous		
Short circuit restart		Auto recovery		
Over temperature protection		>105°C		
Operating temperature	With derating over 55°C	-40 to +85		°C
Maximum case temperature			100	°C
Storage temperature		-40 to +95		°C
Temperature coefficient		±0.02		% / °C
Cooling		Free air convection		
Humidity			95	% RH
Case material		Aluminum		
Potting		Epoxy (IP67 rated)		
Wires		UL1015 18AWG input & 14AWG output *20CM		
Weight		750		g
Dimensions (L X H X W)		7.13 x 2.32 x 1.85 inches	181.00 x 59.00 x 47.00 mm	
MTBF		>400,000 hrs (MIL-HDBK-217F at +25°C)		

### Safety Specifications

#### Parameters

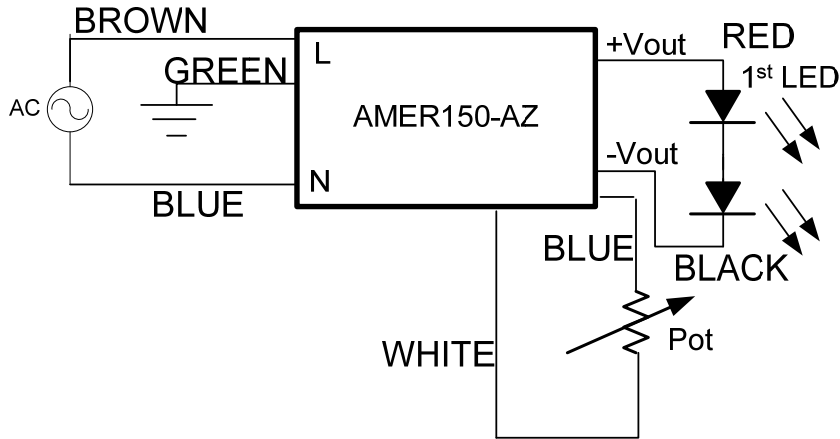
Agency approvals	cULus (pending), CE
Standards	UL8750, UL60950-1, EN55022, class B, EN60529(IP68), EN61347-1, EN61347-2-13

### Dimensions



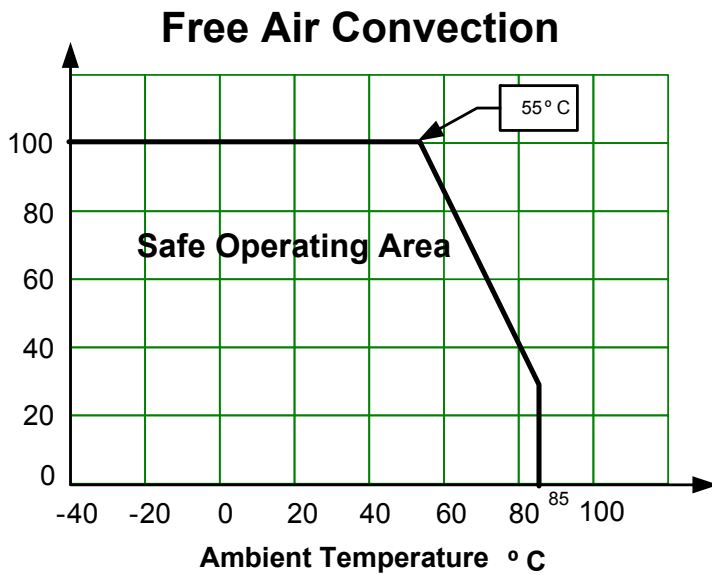
Measurements in Millimeters (inch)  
Case Tolerance: ±0.5 (±0.02)

### Application Circuit



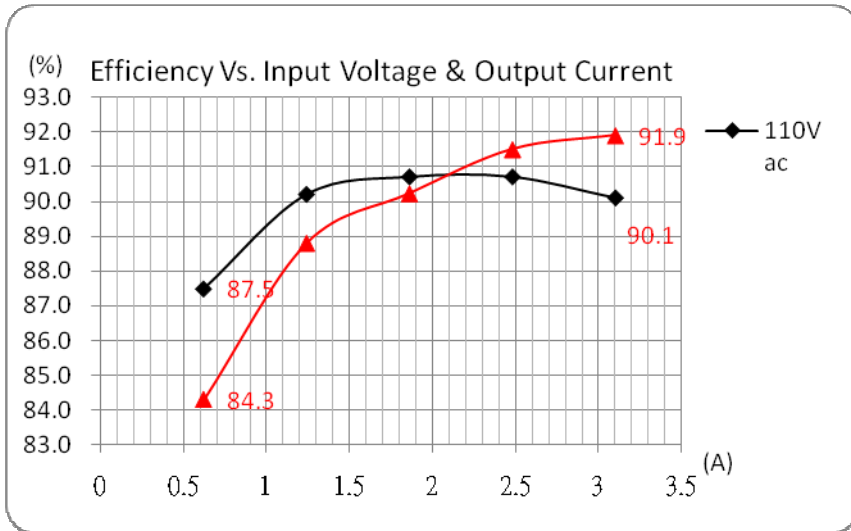
Model Number	Maximum Pot Value (kΩ)
AMER150-50300AZ	19.00
AMER150-36420AZ	28.00
AMER150-24630AZ	27.00

### Temperature graph

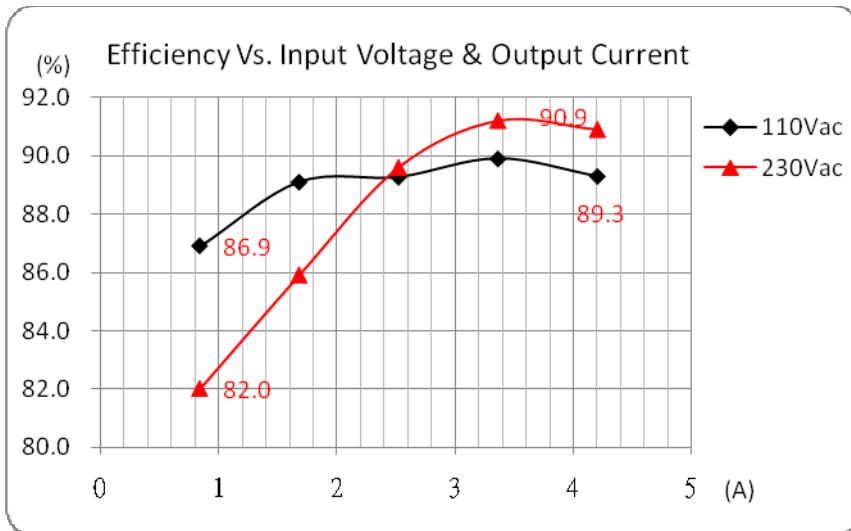


**Efficiency vs. Input Voltage & Output Current (CC mode)**

AMER150-50300AZ

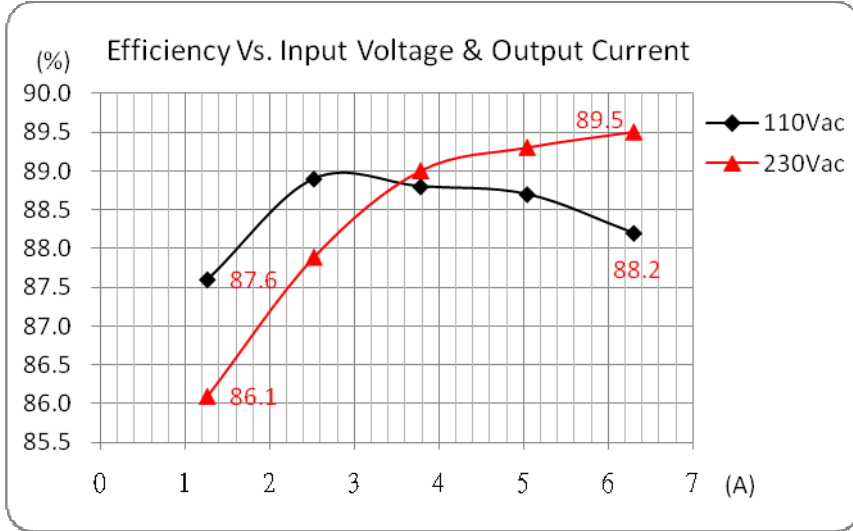


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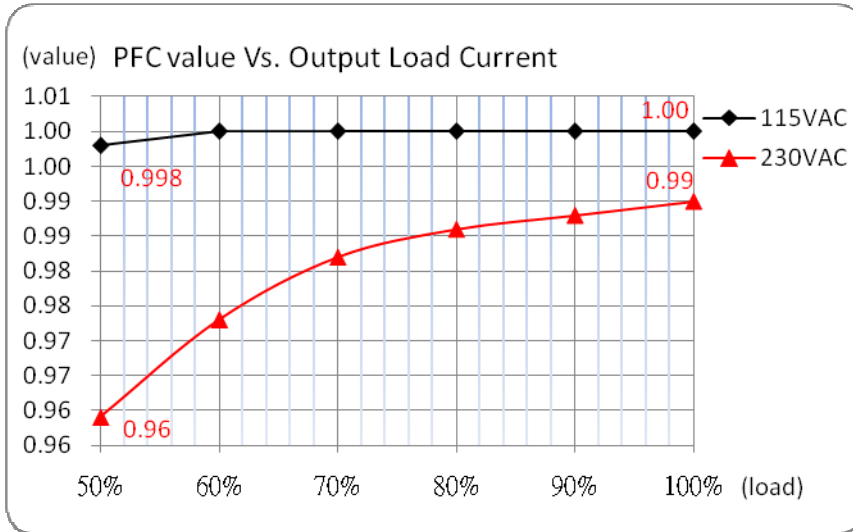
**Efficiency vs. Input Voltage & Output Current (CC mode)  
Continued**

AMER150-24630AZ



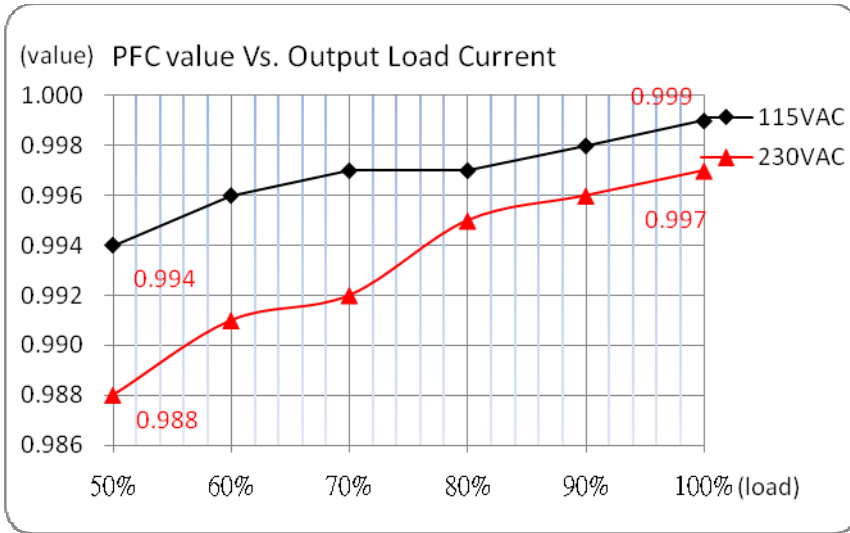
**PFC value vs. Output Load Current (CC mode)**

AMER150-50300AZ

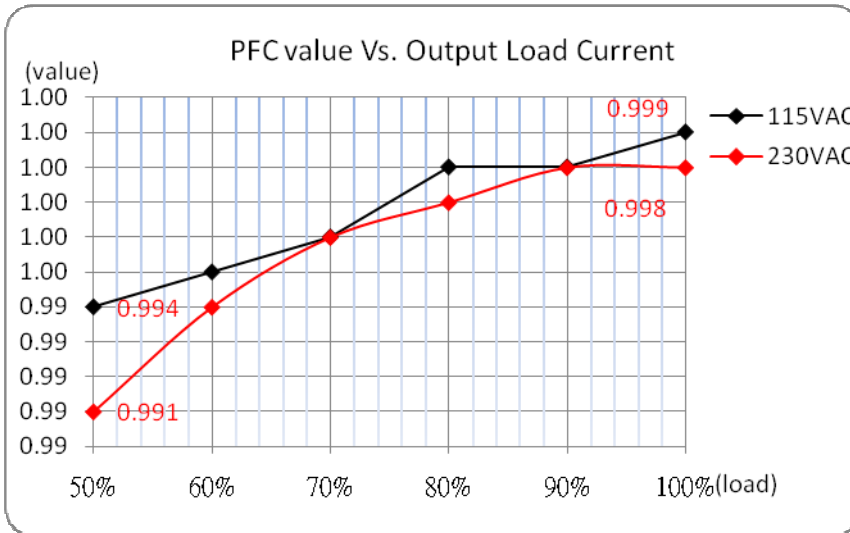


**PFC value vs. Output Load Current (CC mode)**  
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AMER150-36420AZ

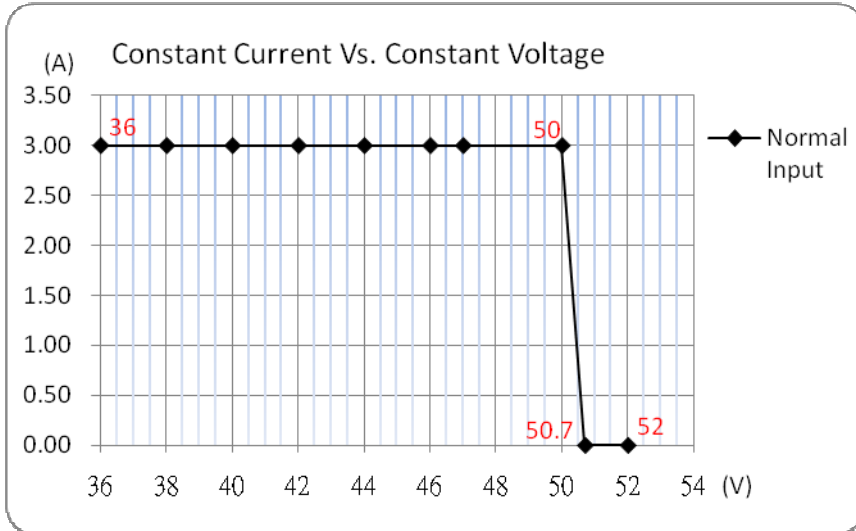


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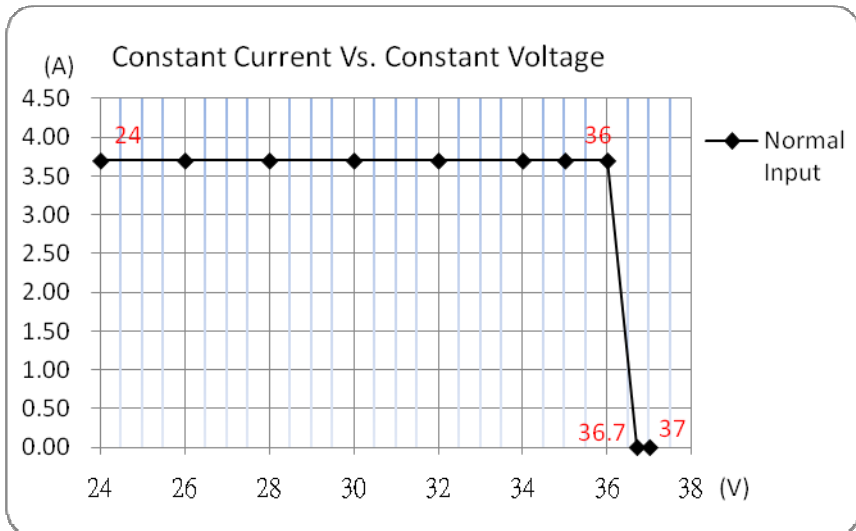


**Constant Current vs. Constant Voltage Mode**

AMER150-50300AZ

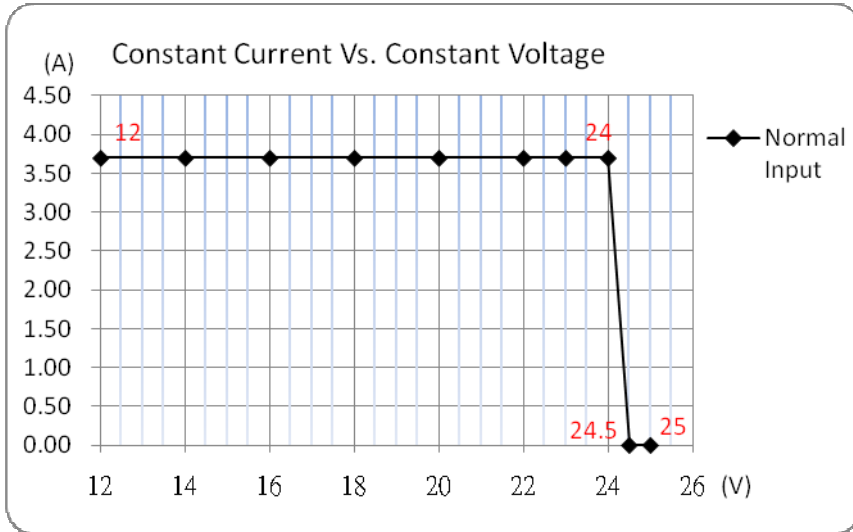


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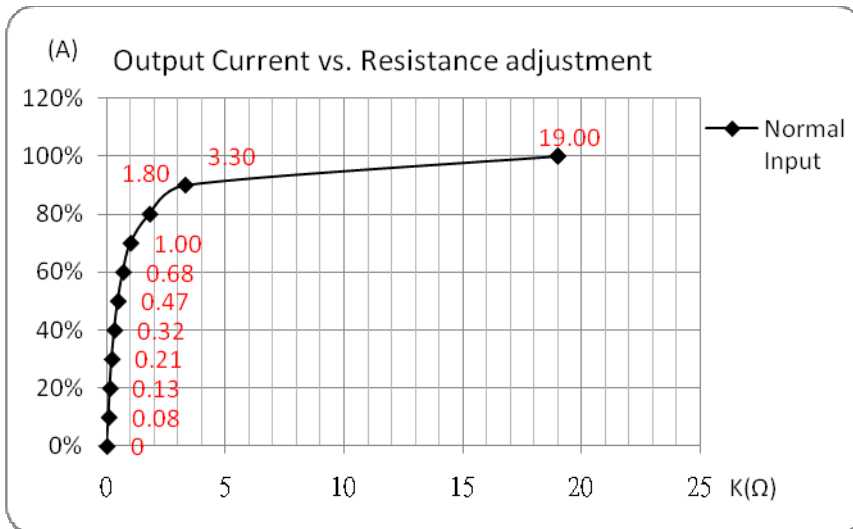
**Constant Current vs. Constant Voltage Mode Continued**

AMER150-24630AZ



**Output Current vs. Radj**

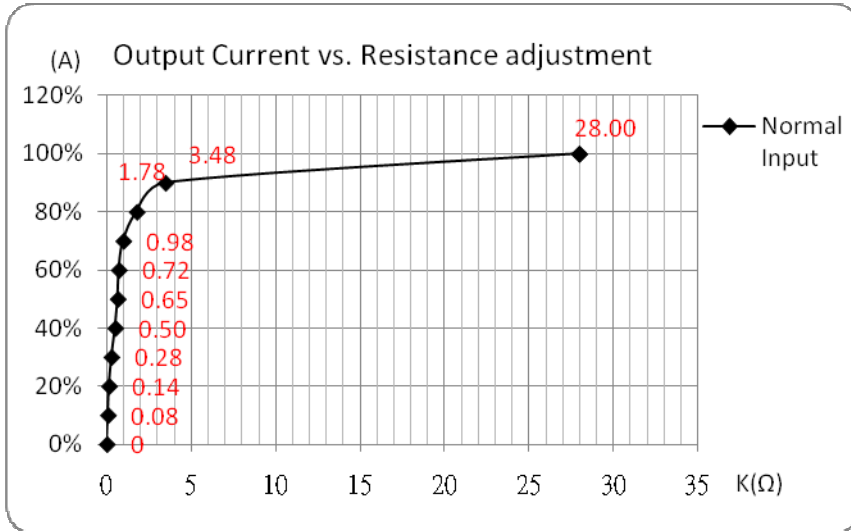
AMER150-50300AZ



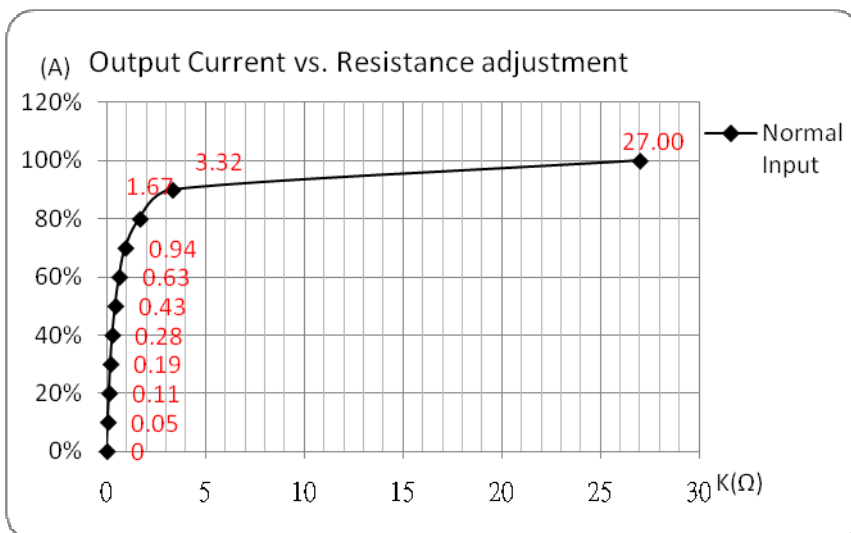


**Output Current vs. R<sub>adj</sub>**  
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AMER150-36420AZ



AMER150-24630AZ



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