

The C13887 series is built-in type high-voltage power supply modules designed for achieving compact and high efficiency.

The internal circuit has achieved high-performance and low consumption. Furthermore, various protection functions are mounted on them.



FEATURES

- High output power (2.5 kV / 15 mA)
- High efficiency
- High voltage / Current monitor output
- Low ripple / Noise

SPECIFICATIONS

Parameter		C13887-12	C13887-52	Unit
Input voltage range		+24 ± 1.2		V
Input current ^(A)	with no load	Typ. 77		mA
	with full load	Typ. 1.75		A
Variable output voltage range		0 to -2500	0 to +2500	V
Specification guaranteed output voltage range		-400 to -2500	+400 to +2500	V
Output current		Max.	15	mA
Line regulation against ±1.2 V input change ^{(A)(B)}		Typ.	±0.01	%
Load regulation against 0 % to 100 % load change ^(A)		Typ.	±0.01	%
Ripple / Noise (p-p) ^{(A)(B)}		Typ.	125	mV
Output voltage control		External controlling voltage (0 V to +5 V) or external potentiometer (50 kΩ)		
Controlling voltage input impedance		Typ.	640	kΩ
Reference voltage output		Typ.	+5.34	V
Output voltage setting (Absolute value)		Typ. Controlling voltage × 500		
Output voltage rise time (0 % → 99 %) ^{(A)(B)}		Typ.	3000	ms
Temperature coefficient ^{(A)(B)}		Typ.	±0.01	% / °C
High voltage monitor output	Range	0 to +5		V
	Precision	2		%
Current monitor output	Range	0 to +5		V
	Precision	2		%
ON / OFF input		TTL positive logic		
ON / OFF input impedance		32		
Operating ambient temperature ^{(A)(B)}		0 to +50		
Operating ambient humidity ^(C)		Below 85		
Storage temperature		-20 to +60		
Storage humidity ^(C)		Below 85		
Weight		315		
Protective functions		Installed input FUSE ^(C) / Reversed power input protection Overvoltage protection for controlling voltage Output overload protection / Output overvoltage protection (latch stop)		

NOTE: ^(A)At maximum output voltage
^(B)At maximum output current
^(C)No condensation

HIGH VOLTAGE POWER SUPPLY C13887 SERIES

Figure 1: Connection diagrams

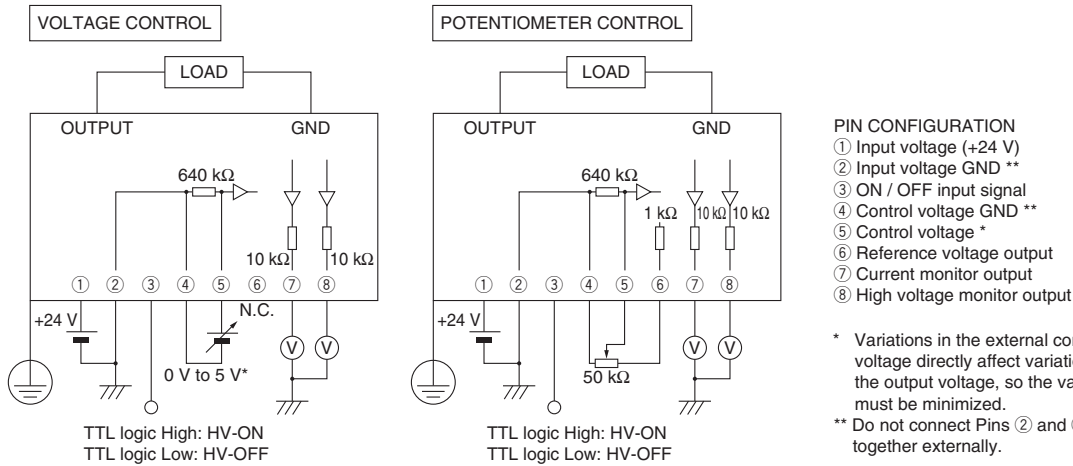


Figure 2: Output voltage controlling characteristic

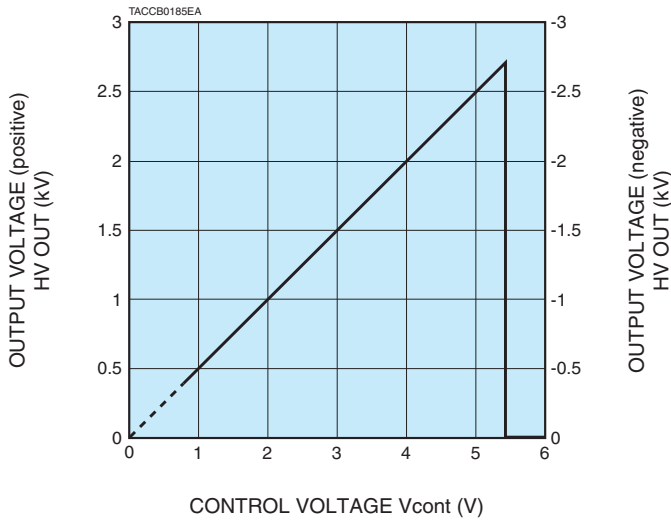


Figure 3: Overload characteristics

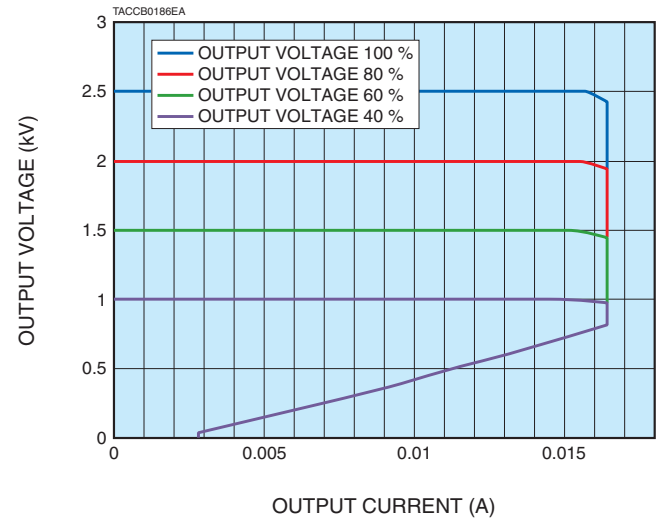
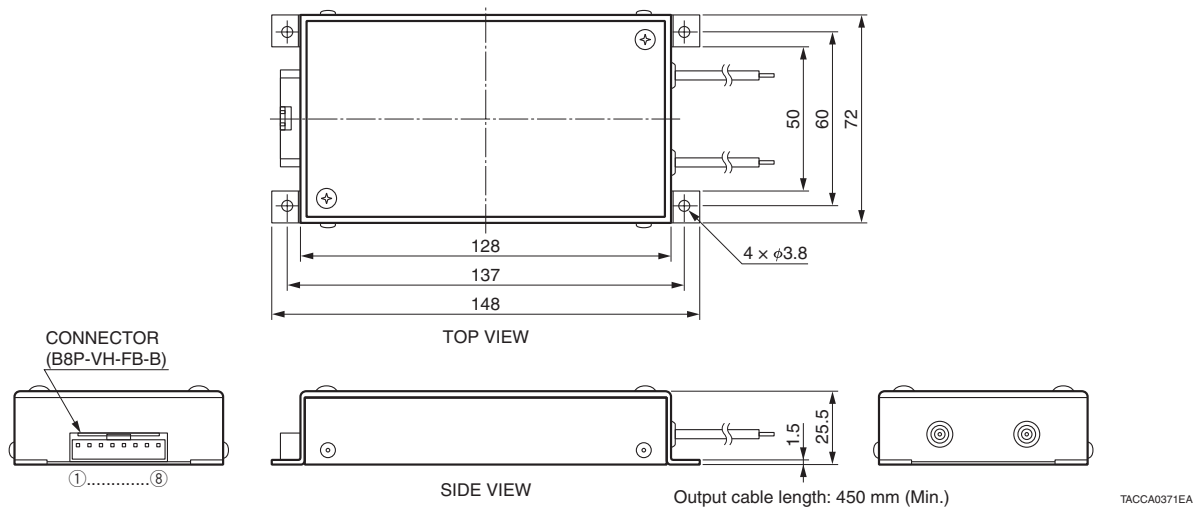


Figure 4: Dimensional outline (Unit: mm)



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