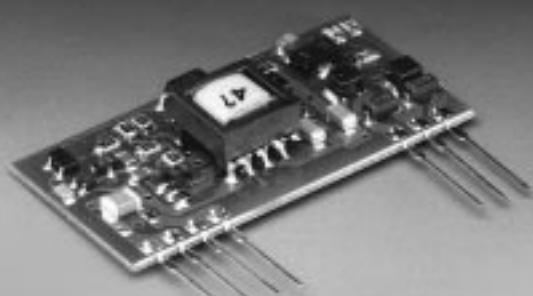


1.5 Watt HD Series

Shindengen America, Inc.



SPECIFICATIONS

INPUT

Voltage See Model Selection Table

OUTPUT

Output Voltage See Model Selection Table

Regulation

Total 5V output $\pm 5\%$
 $\pm 12V$ output $\pm 10\%$

Noise & Ripple, (peak-to-peak)

5V Output 100 mV
 $\pm 12V$ Output 120 mV

Output Current See Model Selection Table

Short-Circuit Protection Special constant-current circuit provides indefinite protection against overload or short circuit

Insulation Resistance 100 M Ω at 500 VDC

Dielectric Strength 500 VDC for 1 minute

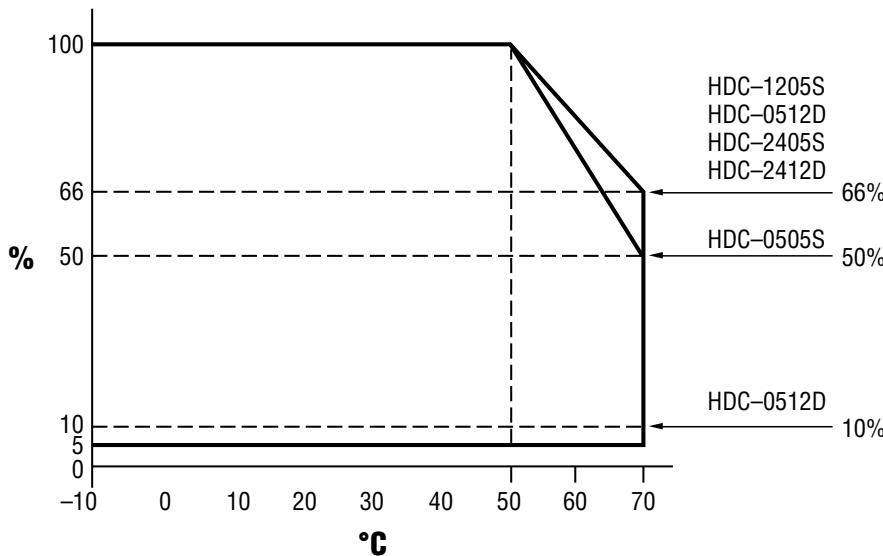
ENVIRONMENTAL

Operating Ambient Temp. -10 to +70°C (See Derating Chart)
Storage Temp. -30 to +80°C

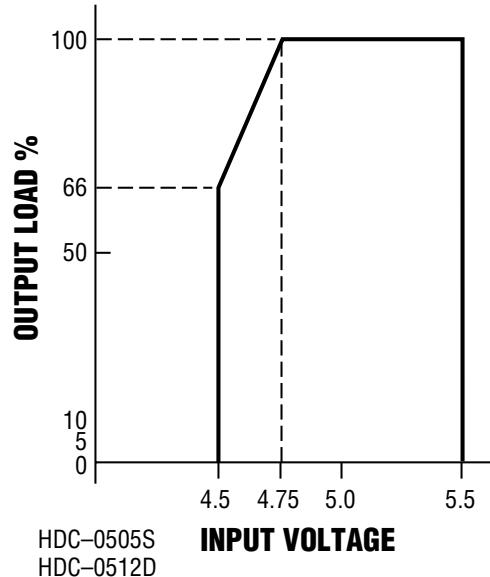
MODEL SPECIFICATIONS

OUTPUT		MODEL AND INPUT RANGE			EFFIC.
VOLTS	MILLIAMPS	4.5-5.5VDC	9.6-14.4VDC	19.2-28.8VDC	
5	15-300	HDC-0505S	HDC-1205S	HDC-2405S	63 - 76%
± 12	6-60	HDC-0512D	—	—	68%
± 12	3-60	—	—	HDC-2412D	80%
± 15	3-50	HDC-0515D	—	—	

DERATING CHART



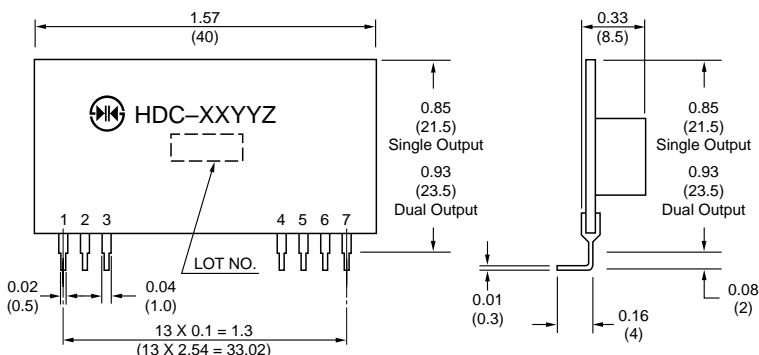
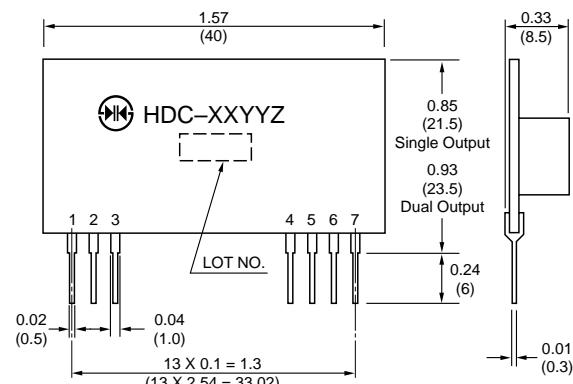
HDC-05XX CHARACTERISTICS



MECHANICAL SPECIFICATIONS

Size (W x D x H) 1.57 x 0.85 x 0.34" (40 x 21.5 x 8.5 mm) (single)
 1.57 x 0.93 x 0.34" (40 x 23.5 x 8.5 mm) (dual)

Weight 0.4 oz (10 g)



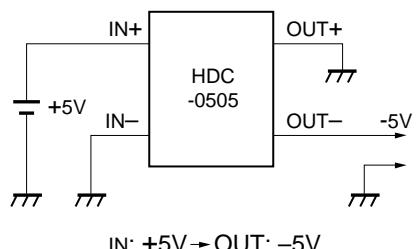
With optional formed leads available - use "-F suffix." Dimensions in inches; () Dimensions in mm.

PIN DESCRIPTION

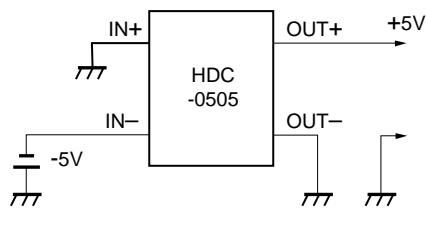
PIN #	1	2	3	4, 5	6, 7
FUNCTION-D	OUT-	COM	OUT+	IN-	IN+
FUNCTION-S	NC	OUT-	OUT+	IN-	IN+

APPLICATION EXAMPLES

1. Reverse Polarity Output

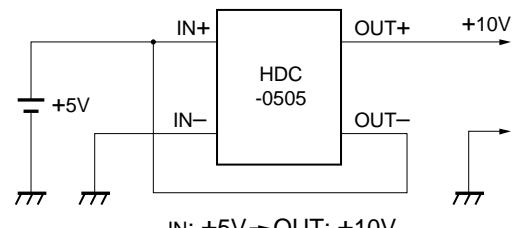


IN: +5V → OUT: -5V



IN: -5V → OUT: +5V

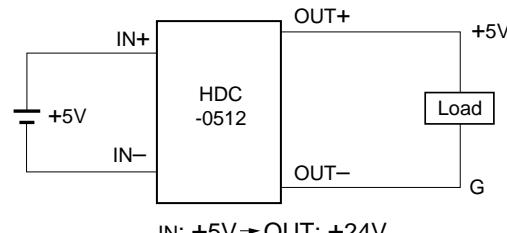
2. Series Connection of Output with Input



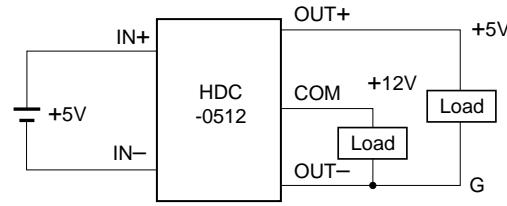
IN: +5V → OUT: +10V

- The output current capacity is the same as the output current capacity of the converter. (For example, an HDC-0505 connected as shown above has an output rating of 10 VDC at 300 mA.)
- The combined output regulation is:
(Output regulation of HDC-0505) + (Input Voltage Fluctuation)

3. Series Connection of Dual Output modules



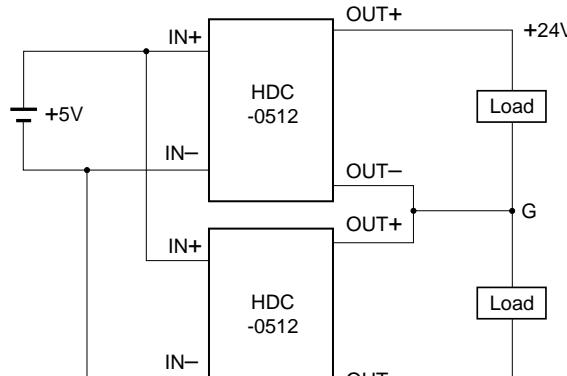
IN: +5V → OUT: +24V



IN: +5V → OUT: +12V, +24V

- Because the current output from the OUT-terminal is the sum of the +24V and the +12V outputs, this value must not exceed the rated output current. In the HDC-0512, this value is 60 mA.

4. Series Connection of Two or More Units



IN: +5V → OUT: ±24V