

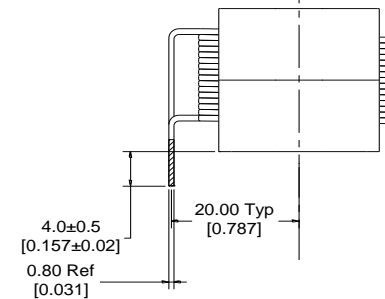
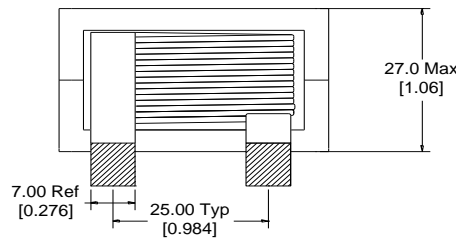
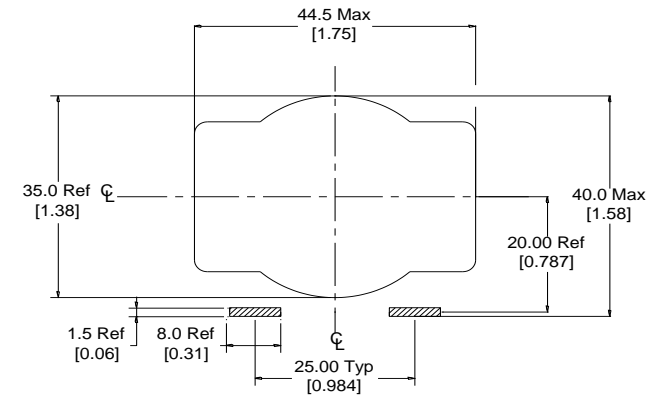
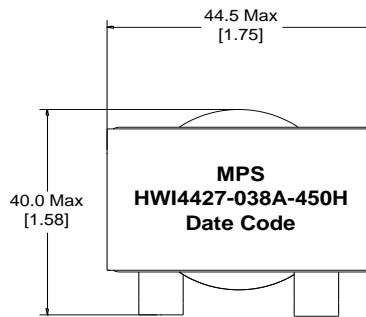
Rev	Description	By	Date
C	Added SRF, Capacitance and changed lead length	KA	6-Dec-18
D	Corrected pin dimensions and DC bias graph	AG	17-Sep-20

### ELECTRICAL SPECIFICATIONS @ 25°C

L:	45μH±15% @ 10kHz, 1Vrms
Isat:	ΔL ≤ 10% @25A ΔL ≤ 30% @48A
Irms:	ΔT ≤ 20°C @ 25A ΔT ≤ 40°C @ 38A
DCR:	4.2mΩ Max
SRF:	7.6 MHz Typ
Capacitance:	9.7 pF
Hipot:	500Vdc, 1mA, 5s, wdg to core
Insulation Class:	Class H 180°C
RoHS Compliant:	Yes

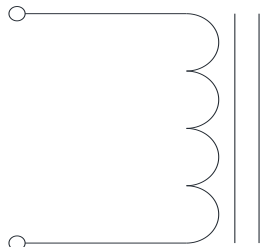
### DIMENSIONS

#### Recommended PCB Layout



Dimensions: mm/[inch]

### SCHEMATIC



### MARKING

MPS  
HWI4427-038A-450H\_REV#  
Date Code

#### Notice of Proprietary Property

These drawings and specifications are the property of MPS and shall not be reproduced, copied or used as the basis of manufacture of sale of apparatus without express written authorization

<b>Dimensions</b> Unless otherwise specified .XX ± 0.254mm [.010"] .XXX ± 0.13mm [.005"]		DRAWN BY: CHECKED BY:	MIG KC	17-Mar-16 18-Mar-16	SIZE <b>A</b>	Part Number <b>HWI4427-038A-450H</b> WEIGHT: 190 gms	REV <b>D</b>
---	--	--------------------------	-----------	------------------------	------------------	--	-----------------



MPS INDUSTRIES, INC.

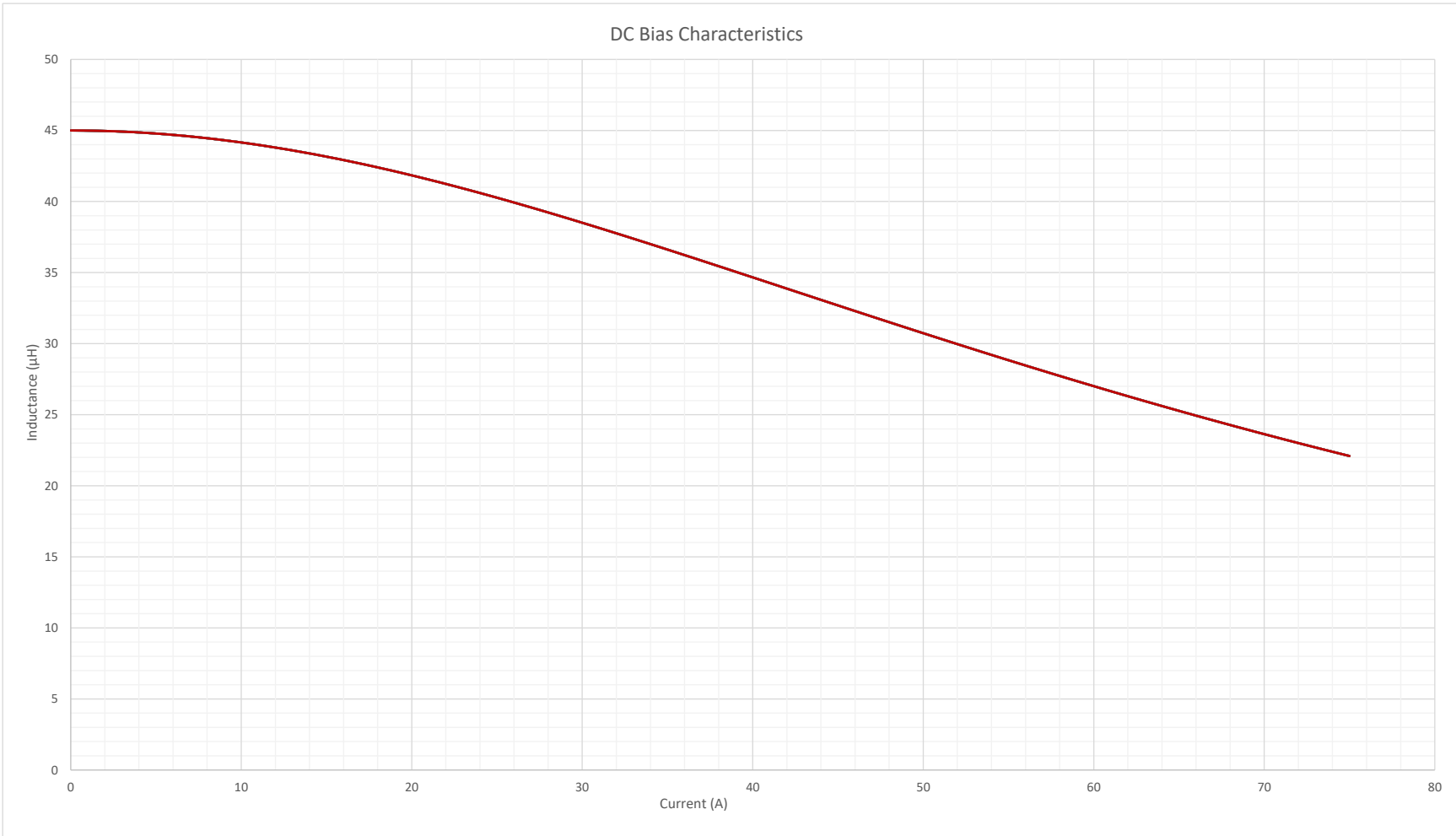
[www.mpsind.com](http://www.mpsind.com)

Tel: (310) 325-1043 Fax: (310) 325-1044

Description

**Helical Wound Inductor**

Rev	Description	By	Date
C	Added SRF, Capacitance and changed lead length	KA	6-Dec-18
D	Corrected pin dimensions and DC bias graph	AG	17-Sep-20



**Notice of Proprietary Property**  
 These drawings and specifications are the property of MPS and shall not be reproduced, copied or used as the basis of manufacture or sale of apparatus without express written authorization



**MPS INDUSTRIES, INC.**  
 www.mpsind.com  
 Tel: (310) 325-1043 Fax: (310) 325-1044

Description		<b>Helical Wound Inductor</b>	
Part Number	<b>HWI4427-038A-450H</b>		REV
SCALE: X:X	WEIGHT: 190 gms	SHEET: 2 OF 2	
		<b>D</b>	

<b>Dimensions</b> Unless otherwise specified .XX ± 0.254mm [.010"] .XXX ± 0,13mm [.005"]	DRAWN BY: CHECKED BY:	MIG KC	17-Mar-16 18-Mar-16	SIZE <b>A</b>
---	--------------------------	-----------	------------------------	------------------