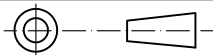


DWG. NO. 83119050

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REVISIONS

REV	DESCRIPTION	DATE	APPROVED



SIGN/DATE



**MCV Technologies Inc.**  
6370 Lusk Blvd., San Diego CA 92121

Unless otherwise specified  
all dimensions are in inches.  
Tolerances are: inch [mm]  
.XX =  $\pm 0.020$  [0.254]  
.XXX =  $\pm 0.010$  [0.508]

DRAWN:

CHK:

ENGR.

Material: FR4/Nickel

Finish: Tin/Nickel

Q.A.

**BANDPASS FILTER**  
**BP33R3189S60A**

SIZE	CAGE CODE	DWG NO.	REV
A	1WTM6	83119050	
SCALE NONE		FILE: 83119050-13	SHEET 1-3

## 1.0 Electrical Specifications

No.	Characteristics	Unit	Typical	Minimum	Maximum
1.1	Center Frequency	Mhz	3188.94		
1.2	0.5 dB Bandwidth	From 3159 to 3219 Mhz			
1.3	Insertion Loss from 3159 to 3219 Mhz	dB			3.0
1.4	Return loss from 3159 to 3219 MHz	dB		15	
1.5	Group delay ripple pk-pk at $3189 \pm 23$ MHz	ns			4
1.6	Amplitude ripple	dB			0.25
1.7	Attenuation	At 350 MHz	dBc	30	
		At 1770 MHz	dBc	35	
		At $3398 \pm 25$ MHz	dBc	10	
		At 3538 MHz	dBc	30	
		At $3678 \pm 25$ MHz	dBc	10	
		At $3889 \pm 25$ MHz	dBc	30	
		At 5.31 to 8.85 GHz	dBc	30	
		At 10.6 GHz	dBc	40	
1.8	In/Out Impedance	Ohms	50		
1.9	Maximum input power (Average)	Watts			2
1.10	Maximum input power (Peak)	Watts			20

## 2.0 Environmental Specifications

2.1	Temperature range (operating)	-55°C to +85°C
2.2	Temperature range (non-operating)	-55°C to +100°C
2.3	Vibration	5 G's max.
2.4	Shock	15 G's max.
2.5	Humidity, relative (Non-condensing)	0-99%

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MODEL: BP33R3189S60A



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SIZE  
A

CAGE CODE  
1WTM6

DWG NO.  
83119050

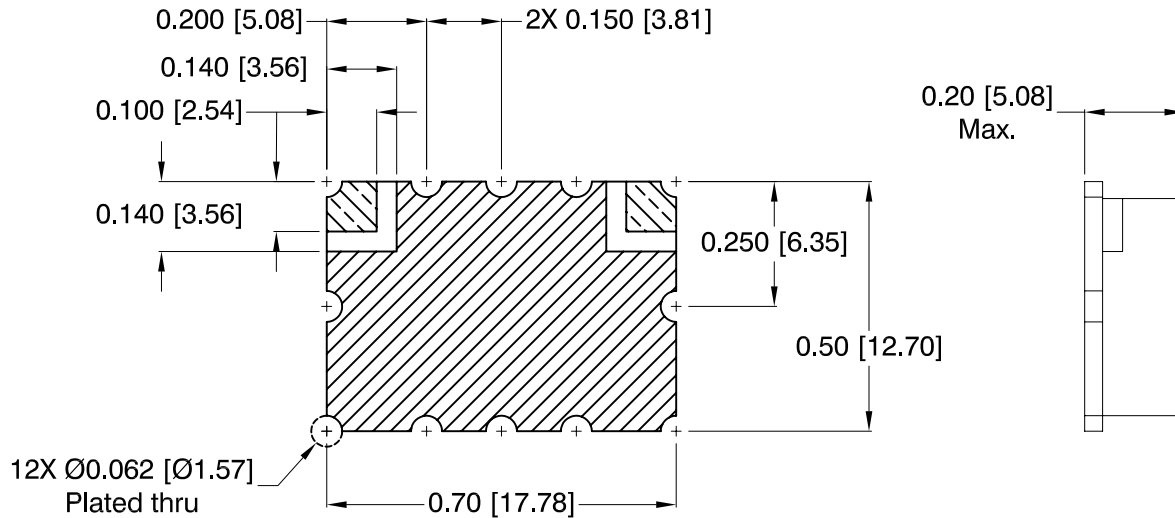
REV

SCALE NONE

FILE: 83119050-23

SHEET 2-3

## 3.0 Mechanical Specifications

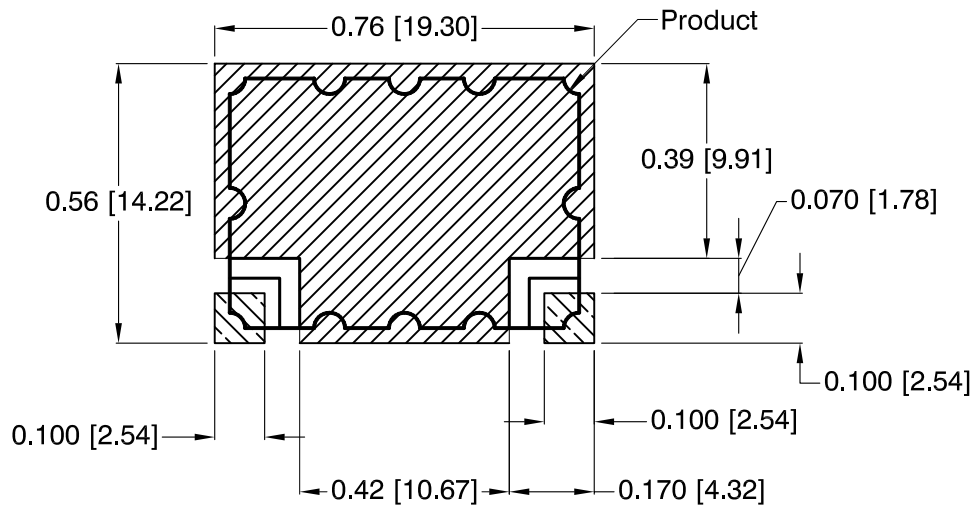


□ SOLDER MASK SR100 (NO METAL)

▨ GROUND

▨ INPUT/OUTPUT

## 4.0 Suggested layout for installation



Material: FR4/Nickel  
 Finish: Tin/Nickel  
 Unless otherwise noted  
 Tol. are: inch [mm]  
 .XX ± 0.020 [0.508]  
 .XXX ± 0.010 [0.254]

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SIZE  
A

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83119050

REV

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FILE: 83119050-33

SHEET 3-3