

BROADBAND DUAL-RIDGE HORN ANTENNA

1.6 GHz to 18 GHz

DRHA1600

KEY FEATURES

- Continuous 1.6–18 GHz coverage from a single aperture
- Ultra-compact for the band (100 mm tall)
- Low VSWR across the operating band (typically below 2.0)
- Gain up to ~13 dBi with a stable, well-behaved boresight beam
- Rugged one-piece build through metal 3D printing
- Professionally designed and hand-tested by engineers in the United States

DESIGN SPECIFICATIONS

- Design: Dual-ridge horn
- Operating Frequency: 1.6 GHz to 18 GHz
- Polarization: Linear (horizontal/vertical based on orientation)
- Connector: SMA female (stainless steel)
- Construction: Additive-manufactured aluminum alloy
- Mounting: #1/4-20 screw hole (see diagram on page 5)
- Height: 3.94 in [100 mm]
- Width: 3.52 in [89.5 mm]
- Length: 3.02 in [76.7 mm]
- Weight: 11.5 oz [325 g]



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PERFORMANCE SPECIFICATIONS

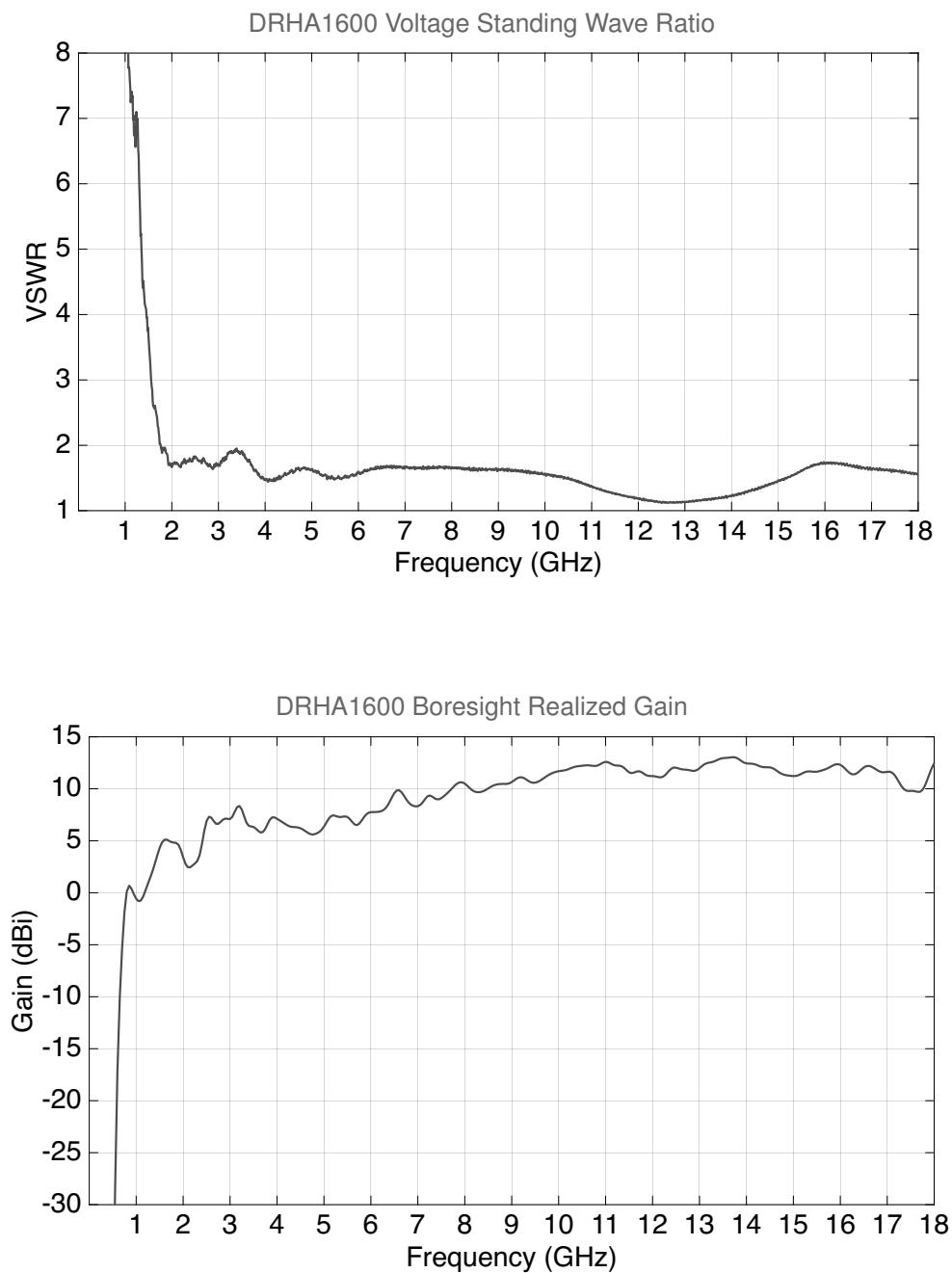
Parameter		Frequency	Min.	Typ.	Max.	Unit
VSWR		1.6 GHz – 2.0 GHz	1.5	2.1	3.2	—
		2.0 GHz – 4.0 GHz	1.3	1.7	2.4	
		4.0 GHz – 15.0 GHz	1.1	1.6	2.0	
		15.0 GHz – 18.0 GHz	1.3	1.7	2.3	
Gain (Realized, Boresight)		1.6 GHz – 4.0 GHz	1.5	5.0	8.0	dBi
		4.0 GHz – 9.0 GHz	4.5	8.0	12.0	
		9.0 GHz – 18 GHz	9.0	12.0	13.5	
HPBW	E-Plane	1.6 GHz – 4.0 GHz	35	75	130	deg.
		4.0 GHz – 18 GHz	35	55	100	
	H-Plane	1.6 GHz – 4.0 GHz	55	100	140	
		4.0 GHz – 18 GHz	35	55	100	
Cross-Polarization (XPD, Boresight)		1.6 GHz – 18 GHz	20	30	60	dB
Input Power (CW)		1.6 GHz – 18 GHz	—	—	25	W
Impedance		—	50			Ω
Connector		—	SMA (female)			—

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TYPICAL PERFORMANCE



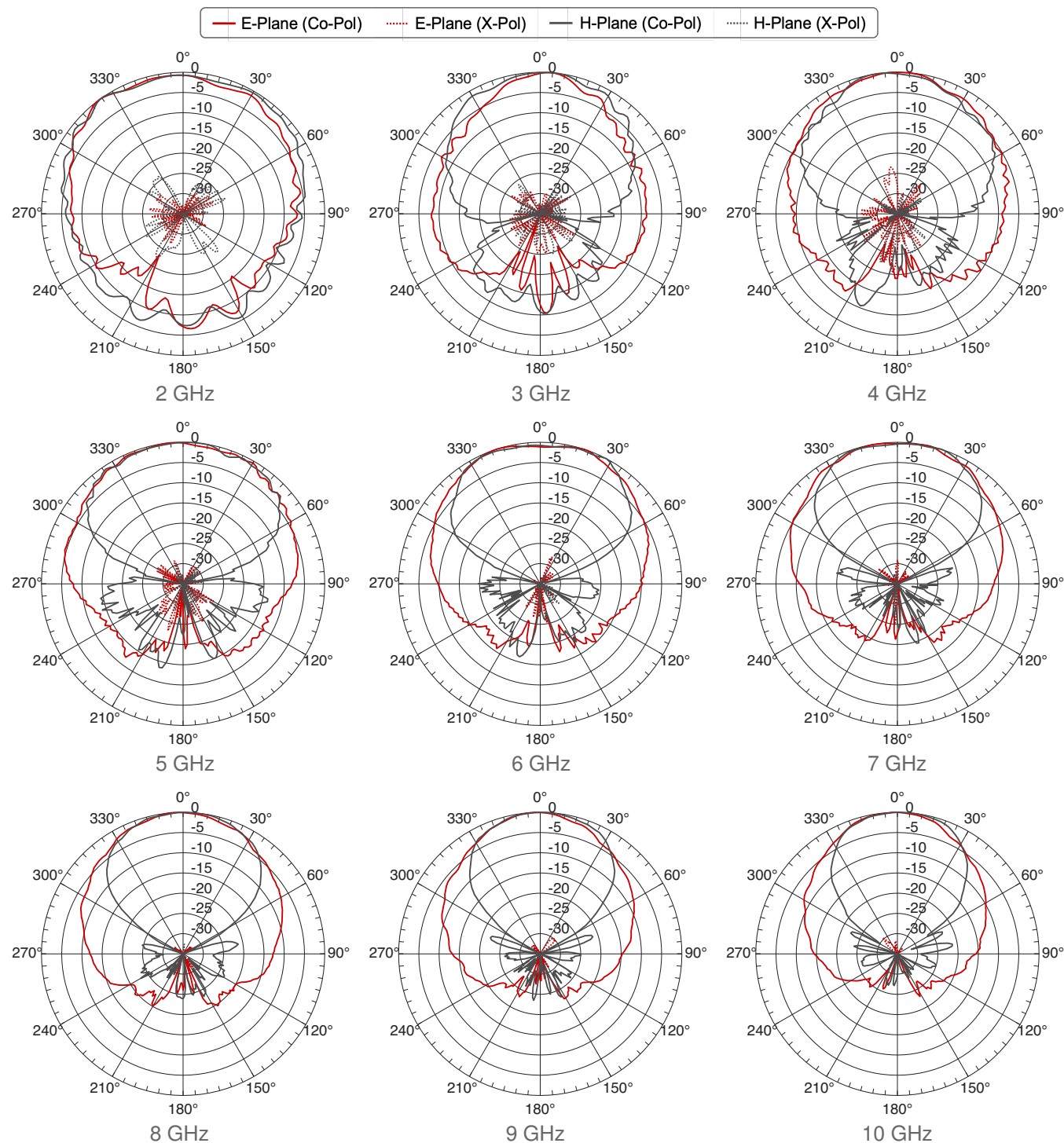
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TYPICAL PERFORMANCE (CONT.)

DRHA1600 Normalized Radiation Patterns

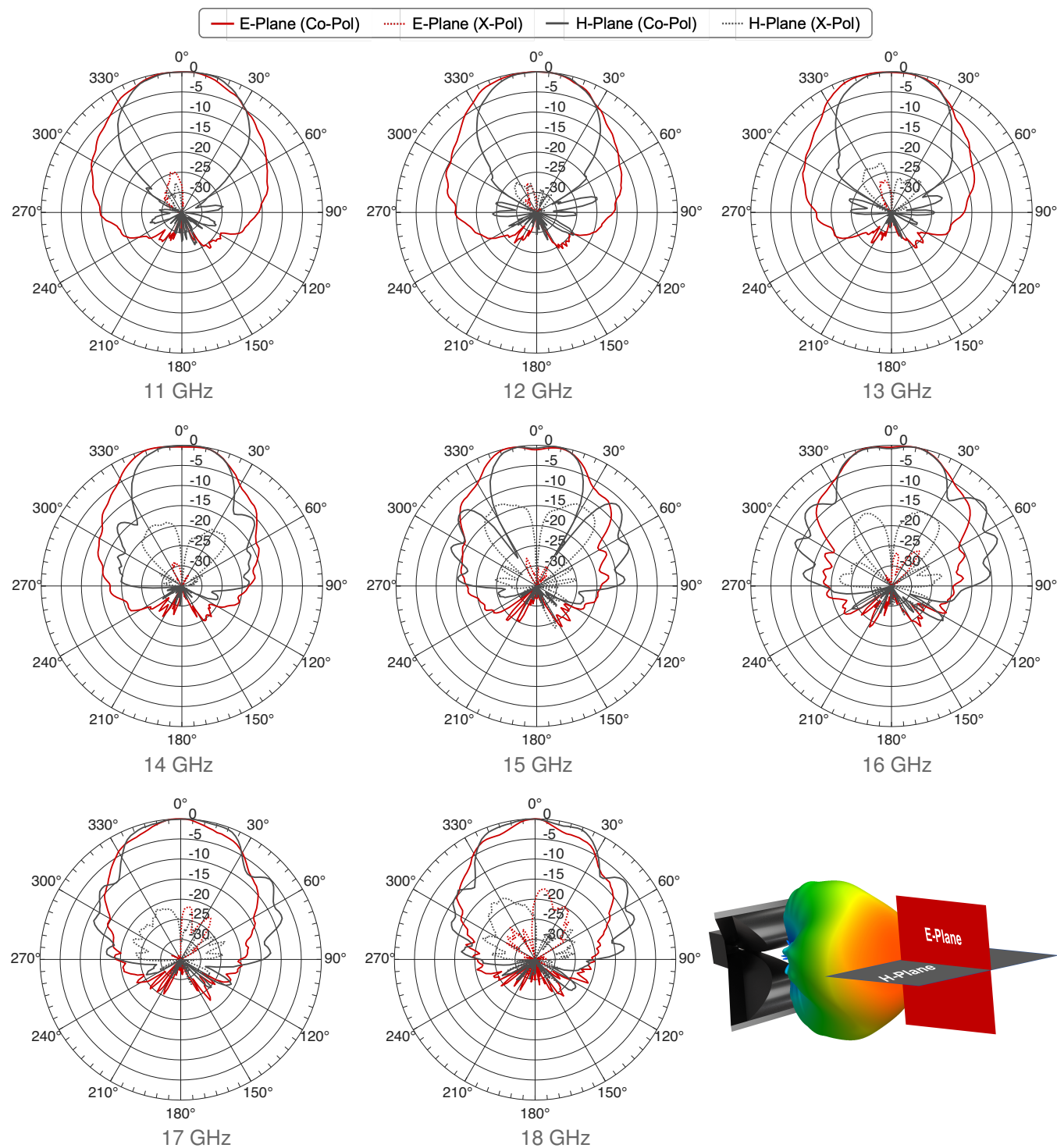


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TYPICAL PERFORMANCE (CONT.)

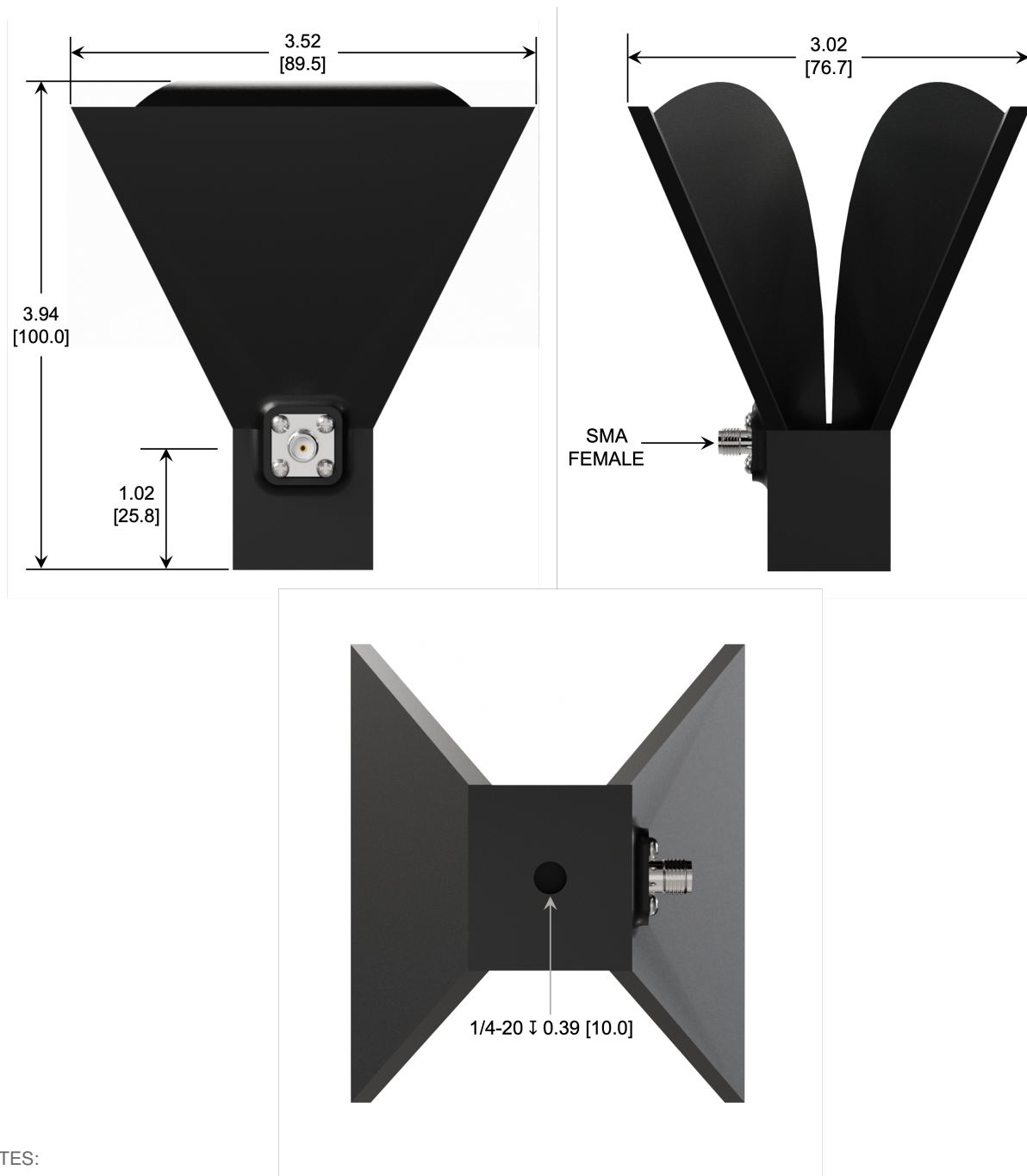


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CAD DRAWING



NOTES:

1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL
2. DIMENSIONS ARE IN INCHES [mm]
3. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME