



- 1.0 ELECTRICAL**  
**1.1 OPERATING FREQUENCY (WAVEGUIDE): 7.05 – 10.0 GHZ**  
 RETURN LOSS: -28DB MIN  
 ISOLATION: 70DB MIN  
 INSERTION LOSS: .05DB MAX

**COAXIAL**

Frequency (GHz)	0-2	1-3	3.5-4.2	5.85-8.2	10.7-14.5	17.0-18.4
VSWR	1.10	1.15	1.25	1.30	1.35	1.50
Insertion Loss(dB)	0.05	0.10	0.25	0.30	0.35	0.5
Isolation(dB)	80	70	60	60	50	50

- 1.5 POWER HANDLING (WAVEGUIDE): 5KW C/W**  
**1.6 DRIVING VOLTAGE: OPTIONAL**  
**1.7 C-FORM CONTACTS: 4 IN STD UNIT**  
**1.8 INHIBIT CONTACTS: OPTIONAL (OPEN BEFORE VSWR EXCEEDS 1.3:1)**  
**1.9 SWITCHING TIME: 80 MSEC MAX**  
**1.10 POWER CONNECTOR: OPTIONAL**

- 2.0 MECHANICAL**  
**2.1 WAVEGUIDE SIZE: WR112**  
**2.2 FLANGE: OPTIONAL**  
**2.3 PRESSURE: 20 PSI (INCLUDING DRIVER)**  
**2.4 MATERIAL: 80% ALUMINUM**  
**2.5 FINISH: LUSTERON ON WAVEGUIDE, ANODIZE ON DRIVER**  
**2.6 WEIGHT: .650 KG**  
**3.0 ENVIRONMENTAL**  
**3.1 OPERATING TEMP: -40° TO +75° C**  
**3.2 NON OPERATING TEMP: -50° TO +100° C**  
**3.3 HUMIDITY: 100%**  
**3.4 SHOCK & VIBRATION: STD SHIPPING**

**AST 112**

**WAVEGUIDE/COAX DETAILS**  
 G CPRG  
 R CPR  
 F Flat  
 O O-ring  
 C Choke  
 M Metric  
 DS Dual SMA  
 DN Dual N

**DRIVER DETAILS**  
 W Weather  
 L Lock  
 S Side Connector  
 19P 19 pin  
 10P 10 pin  
 6P 6 pin  
 Special wiring See Wiring Diagrams

**VOLTAGE DETAILS**  
 M Manual  
 P Positive  
 N Negative

Waveguide Size: 1 2 3 4 5 6  
 Dual Option: DS DN  
 Coax Frequency Code: [ ] [ ] [ ] [ ] [ ] [ ]  
 Flange: [ ] [ ] [ ] [ ] [ ] [ ]  
 Thread: [ ] [ ] [ ] [ ] [ ] [ ]  
 Option 1: [ ] [ ] [ ] [ ] [ ] [ ]  
 Option 2: [ ] [ ] [ ] [ ] [ ] [ ]  
 Connector option: [ ] [ ] [ ] [ ] [ ] [ ]  
 Option 3: [ ] [ ] [ ] [ ] [ ] [ ]  
 Voltage Option: [ ] [ ] [ ] [ ] [ ] [ ]  
 Voltage (omit for manual): [ ] [ ] [ ] [ ] [ ] [ ]

Code	1	2	3	4	5	6
Connector	N or SMA	N or SMA	N or SMA	N or SMA	SMA only	SMA only
Freq Range (GHz)	DC - 2.0	1.0 - 3.0	3.5 - 4.2	5.85 - 8.2	10.7 - 14.5	17.0 - 18.4



BREAK ALL CORNERS AND SHARP EDGES

UNLESS OTHERWISE SPECIFIED	DRAWN	MC	05/21/2017
FRACTIONAL ± 1/32	CHECKER		
DECIMAL .XXX ± .010			
ANGULAR .XX ± 1/2°			
MATERIAL: NOTED			
SPEC:			
FINISH: NOTED			
SPEC:			

**PROPRIETARY INFORMATION**  
 THIS DOCUMENT CONTAINS PROPRIETARY INFORMATION WHICH SHALL NOT BE REPRODUCED, TRANSFERRED TO OTHER DOCUMENTS, DISCLOSED TO OTHERS, USED FOR MANUFACTURING OR ANY OTHER PURPOSE WITHOUT PRIOR WRITTEN PERMISSION FROM AST.

**WAVEGUIDE/COAXIAL  
 DUAL SWITCH  
 WR 112**

