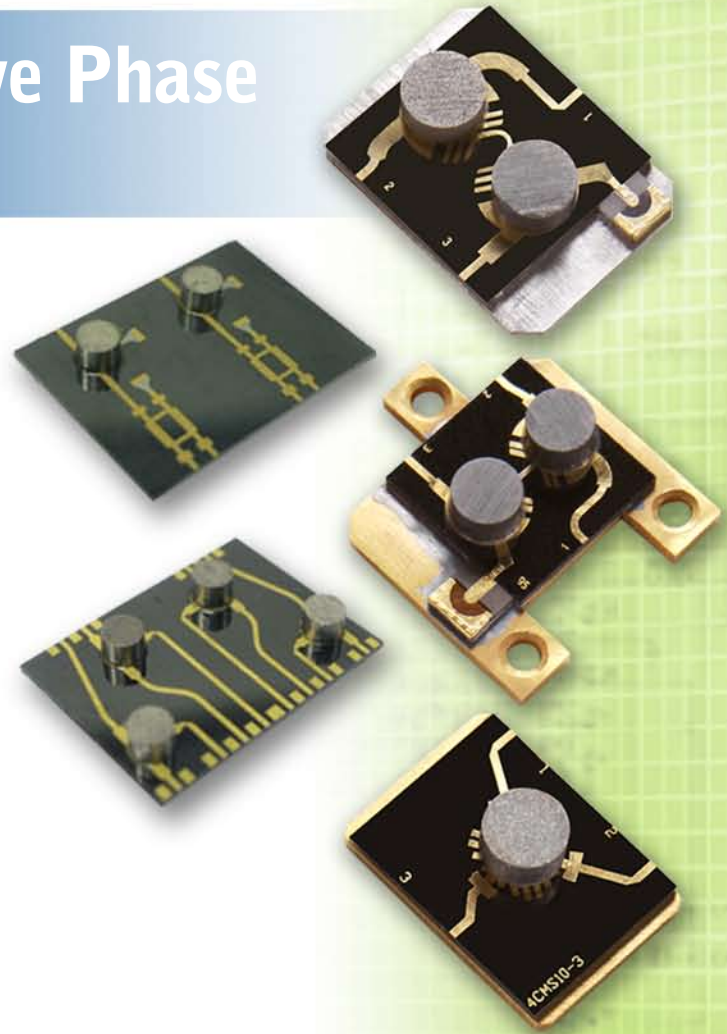


# Ferrite Devices for Active Phase Array Applications

**(Frequencies: S Band; C band; X band; Ku band; Ka band)**

Dorado International introduces a line of ferrite devices to be used at the front-end of T/R modules for active phase array applications and to provide phase and amplitude control in RF, microwave and millimeter-wave systems. This product line includes dozens of standard single junction and multi-junction isolators & circulators developed especially for phased array systems. Each part, by request, could be integrated with many active and passive functions.



## FEATURES

- Ultra low dimensions and weight
- Excellent phase and amplitude control
- High isolation and low insertion loss
- Designed to be integrated into shipboard, ground based, and airborne systems, including many defense applications
- Could be integrated with many active and passive functions: filters, limiters, hybrids
- Custom component solutions including customer specified packaging, multi-junction circulator assemblies and custom interfaces

# Ferrite Devices for Active Phase Array Applications

## DOUBLE JUNCTION CIRCULATORS

FREQ. RANGE (GHz)	BAND WIDTH	MODEL NUMBER	INSERTION LOSS (dB)		ISOLATION (dB)			VSWR (Max)	LOAD POWER (W)	Fig
			Tx-Ant	Ant-Rx	Ant-Tx	Rx-Ant	Tx-Rx			
3.05 – 3.50	FULL	3CMD35-1X	0.60	1.20	16.00	32.00	16.00	1.35	12.00	1
8.50 – 10.50	10%	4CMD10-1X	0.50	0.90	20.00	33.00	20.00	1.25	6.00	2
8.50 – 10.50	10%	4CMD10-2X	0.50	0.90	20.00	33.00	20.00	1.25	12.00	3
13.0 – 15.6	9%	4CMD15-1X	0.50	0.90	20.00	33.00	20.00	1.25	2.00	3

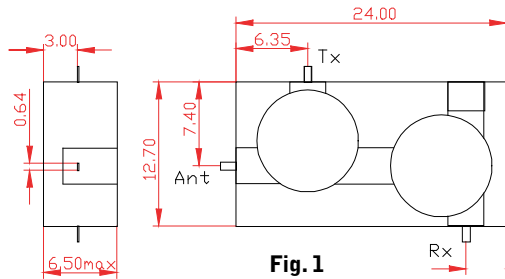


Fig. 1

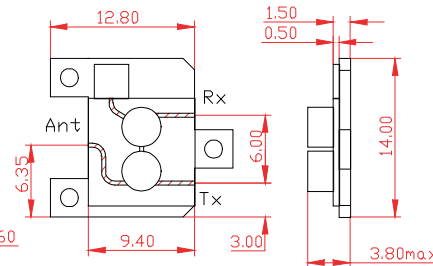


Fig. 2

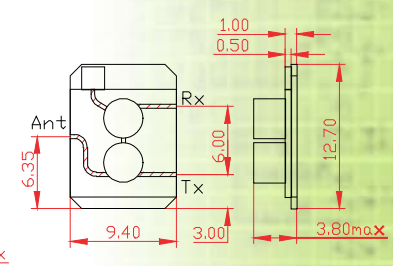


Fig. 3

## SINGLE JUNCTION CIRCULATORS

FREQ. RANGE (GHz)	BAND WIDTH (%)	MODEL NUMBER	INSERTION LOSS dB (Max)	ISOLATION dB (Min)	VSWR (Max)	AVG POWER (W)	OPERATING TEMP. RANGE	Fig
8.0 – 12.0	FULL	4CMB10-1	0.60	18.00	1.30	2	-55° to +85°C	4
9.3 – 10.4	FULL	4CMS10-3	0.60	18.00	1.30	3	-54° to +95°C	5
14.4 – 15.4	FULL	3CMM15-2R	0.50	20.00	1.30	5	-40° to +70°C	6

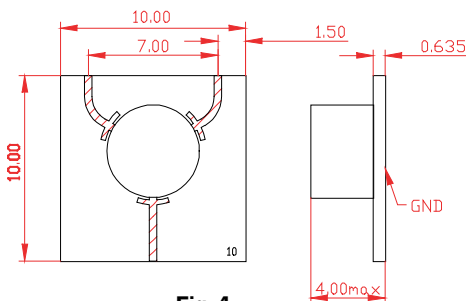


Fig. 4

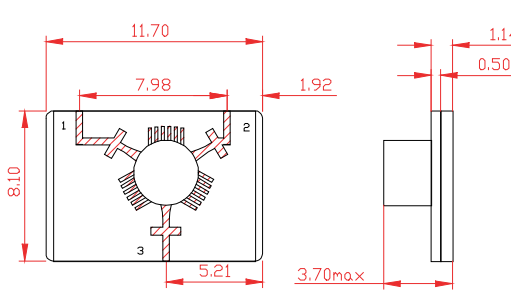


Fig. 5

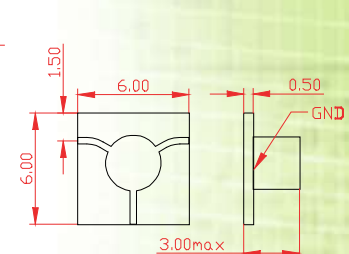


Fig. 6