



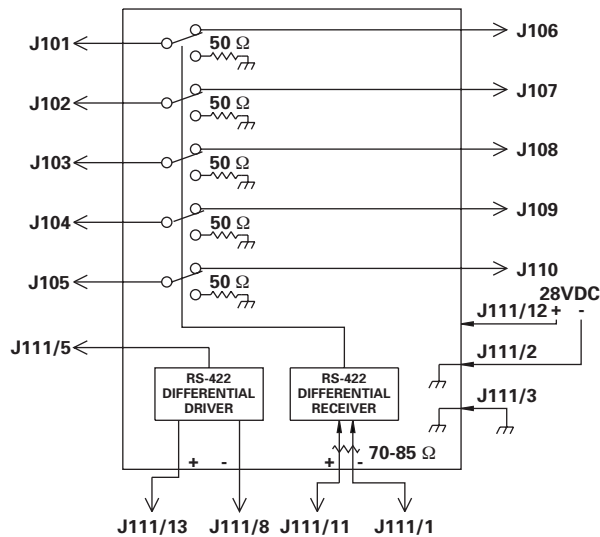
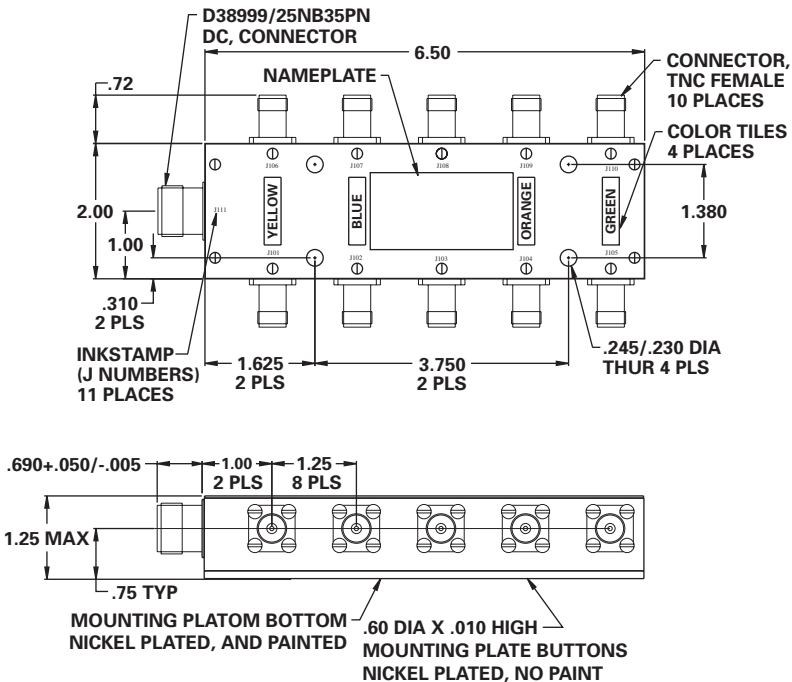
**MODEL NO.  
100D9109**

**Combiner**

**FEATURES**

- 500 - 2000 MHz
- Amplitude / Phase Tracking
- 0.7 dB Insertion Loss
- 80 dB Isolation

MFD



**GUARANTEED PERFORMANCE**

J111 PIN OUTS	
PIN	FUNCTION
1	CONTROL RS-422 RETURN
2	AIRCRAFT GROUND
3	SAFETY GROUND
4	SPARE
5	BLANKING INPUT +5V
6	SPARE
7	SPARE
8	BLANKING OUTPUT RS-422 RETURN
9	SPARE
10	SPARE
11	CONTROL RS-422 POSITIVE
12	+28V
13	BLANKING OUTPUT RS-422 POSITIVE

Parameter	Min	Typ	Max	Units	Conditions
Operating Frequency	500		2000	MHz	
DC Current		137	250	mA	At +28 VDC Supply per MIL-STD-704A Reverse Polarity Protected
Control Type				mA	Differential Line Receiver
J111/11, J111/1					RS-422/ Stanag-3909 70-85 Ω
J111/5				mA	Termination when open, All Channels are Through
Control Current				μA	1 Line TTL, Input
	High			μA	Logic "1" = Output Logic "1" RS-422
	Low			μA	
Insertion Loss		0.67	1	dB	
Amplitude Tracking		±0.02	±0.1	dB	Channel to Channel
Phase Tracking		±1	±5	DEG	Channel to Channel
Isolation	70	83		dB	
VSWR		1.15/1	1.3/1		All Ports
	Thru	1.13/1	1.5/1		J101 to J105
	Termination		INF		J106 to J110
	Reflective				
Impedance		50		OHMS	
Switching Speed		400	750	nSec	50% TTL to 90% / 10% RF
		±40	±100	nSec	Channel to Channel
Transition (Rise/Fall) Time				μSec	90% / 10% or 10% / 90% RF
Switching (Video) Transients			-100	dBm	.5 - 20 GHz, 13 μSec Repetition Rate
Intercept Points				dBm	
	2nd			dBm	
	3rd			dBm	
RF Power		-100	+28	dBm	
	Operate		+30	dBm	
	No Damage				
Weight			1.5	LBS	
Operating Temperature	-54	+25	+110	°C	TA