

# Ironwood Electronics, Inc.

## Model P-P138A

### Report summary sheet

#### Pin test configuration:

12 pins in a 1 mm pitch array, two signal pins surrounded by ground.  
Delrin pin block 0.5" x 1.2,  $\epsilon = 3.6$ , 0.098" thick

Current Carrying Capacity: 4A

#### Performance:

##### Time domain:

Signal delay	=	45 ps
Rise time, open circuit	<	24.6 ps
Rise time, short circuit	<	41.9 ps
Rise time, thru 50 $\Omega$	<	34.1 ps

##### Frequency domain:

Insertion loss	<	0.5 dB to 4.1 GHz
	<	1 dB to 10 GHz
VSWR	<	1 : 2 to 9 GHz
S31 (crosstalk)	<	-10 dB to 8 GHz

##### Equivalent circuit parameters:

Pin inductance	=	0.62 nH
Mutual inductance	=	0.065 nH
Pin to ground capacitance	=	0.45 pF
Pin to pin capacitance	=	0.042 pF
Transmission line	=	$Z_0 = 43 \text{ ohms}$ , $T_1 = 45 \text{ ps}$