

Phase Detectors

Level 10 (+10 dBm LO, up to +5 dBm RF)

SPECIFICATIONS	MODEL NO.	
	EMPD-1	ERPQ-1
Frequency Range (MHz)	1 - 100	1 - 100
L and R Ports	DC - 50	DC - 50
Output Ports		
Scale Factor (mV/degree)	8	8
Impedance (ohms)		
L and R Port	50	50
I Port	500	500
L and R Signal Levels	+7 dBm	+7 dBm
Isolation, L-R min	40 dB	40 dB
Max, DC Outing (mV)		
Typ	1000	1000
Min	750	750
Output Polarity (L and R In-phase)	Neg	Neg
DC Output Offset (mV)		
Typ	0.2	0.2
Max	1	1
Figure-of-Merit, M	143 typ	143 typ
Case	R7	R1
Pin Out	1	1
Unit Price \$ (1 - 9)	21.25	18.25

PIN OUT TABLE - PHASE DETECTORS

PIN OUT NO.	REF (L)	RF IN (R)	DC OUT	GROUND*	CASE GROUND
1	8	1	3,4**	2,5,6,7	2

*Ground externally.

**Connect pins together.

PHASE DETECTOR SELECTION GUIDE

MODEL NO.	FREQUENCY RANGE RF/LO (MHz)	IMPEDANCE L & R (Ohms)	X (Ohms)	SIGNAL DRIVE LEVELS (dBm)	ISOLATION L-R (dB) TYP	DC OUTPUT (mV) TYP	DC OFFSET (mV) TYP	DC OUTPUT POLARITY	CASE STYLE	UNIT PRICE \$ (5-9)
PD-120	5-1000	50	500	+7	50	400	1.0	Negative	FP-2	62.00
PD-121	3-200	50	500	+7	50	1100	1.0	Positive	FP-2	156.00

CASE STYLE: C = CONNECTORIZED; FP = FLATPACK; TO-8 = TO-8 PLUG IN; SF = SURFACE MOUNT
PRICES AND SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE