P-CPM-15-4 – P-CPM-450-4 COMPLEX PHASE MODULATORS

TECHNICAL FEATURE

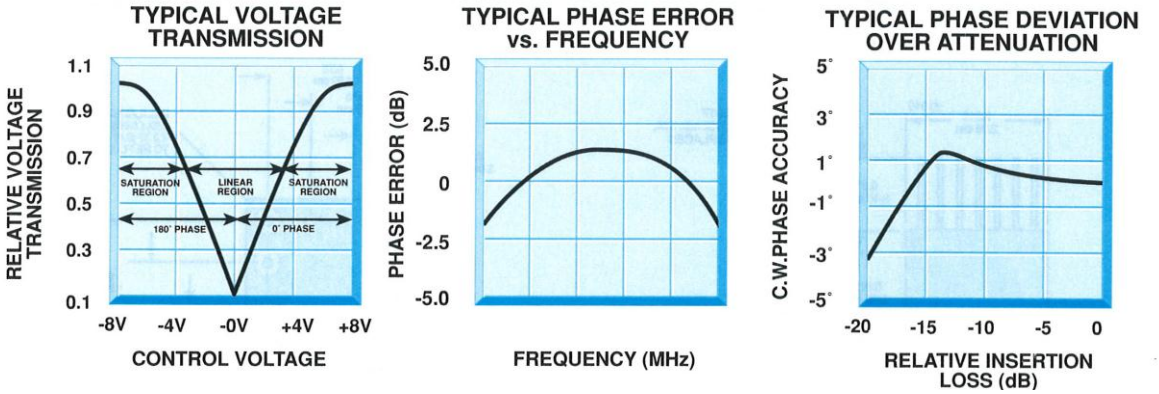
PERFORMANCE (0° TO +70°c)

Saturated Region Insertion Loss	11.0 dB max
Linear Region Insertion Loss	12.0 dB max
Phase Unbalance	±5.0° max
Amplitude Unbalance	±1.0 dB max
Input VSWR	1.8 max
Output VSWR	1.8 max
Input 1 dB Compression Point	+ 15 dBm typ
	+12 dBm typ
Third Order Intercept Point	+15 dBm typ
	+17 dBm min
Input Power (Non-Destruct)	+20 dBm max
Attenuation Range	40 dB min
DC Offsets	±75 dBm min
Control Port (DC Coupled) Frequency Range	5000 KHz
Control Current	5 mAdc max
Bias Voltage	±15 Vdx
Bias Current	25 mAdc max
Tempurature Range (2)	-30° to +70° C

(2) Military temp. range -54°C to +85°C optional

PRODUCT SELECTION GUIDE

Part No.	Frequency Range MHz
P-CPM-15-4	10 to 20
P-CPM-30-4	20 to 40
P-CPM-45-4	30 to 60
P-CPM-60-4	40 to 80
P-CPM-70-4	55 to 90
P-CPM-100-4	70 to 140
P-CPM-120-4	80 to 160
P-CPM-150-4	100 to 200
P-CPM-200-4	140 to 280
P-CPM-240-4	160 to 320
P-CPM-300-4	225 to 400
P-CPM-400-4	300 to 500
P-CPM-450-4	375 to 525



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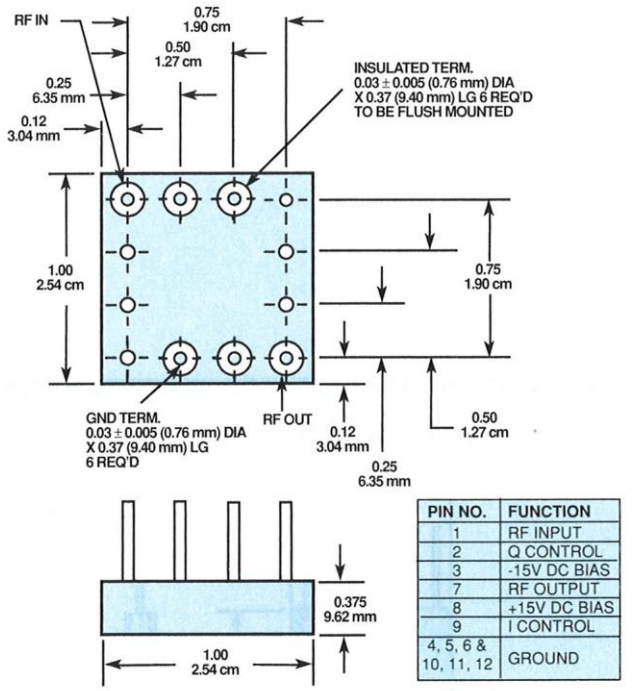
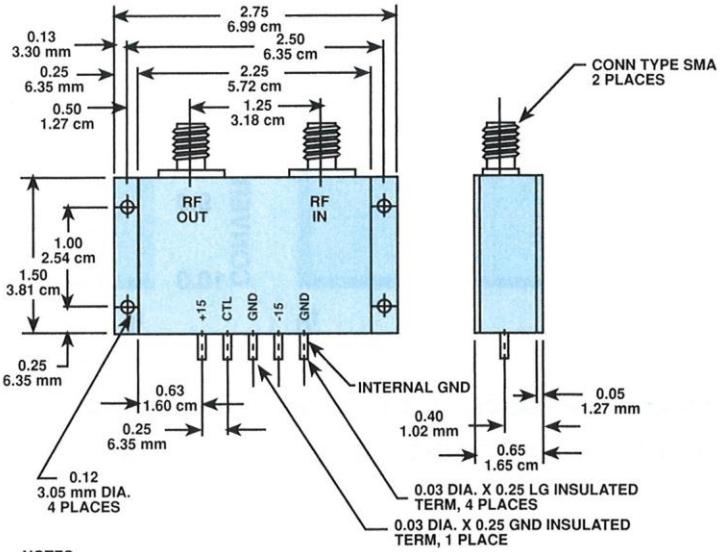
P-CPM-15-4 – P-CPM-450-4 COMPLEX PHASE MODULATORS

MECHANICAL OUTLINE

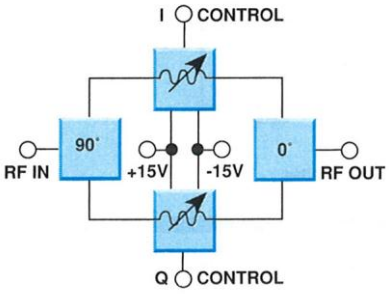


PIN NO.	FUNCTION
1	RF INPUT
2	Q CONTROL
3	-15V DC BIAS
7	RF OUTPUT
8	+15V DC BIAS
9	I CONTROL
4, 5, 6 & 10, 11, 12	GROUND

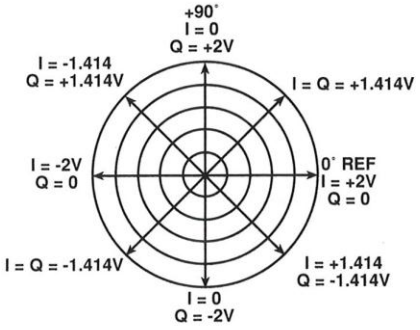


NOTES:
1. MAT'L: 6061-T6 ALUMINUM
FINISH: TIN PLATE PER
OLEKTRON QWI-1051

FUNCTIONAL SCHEMATIC



CONTROL SETTINGS



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