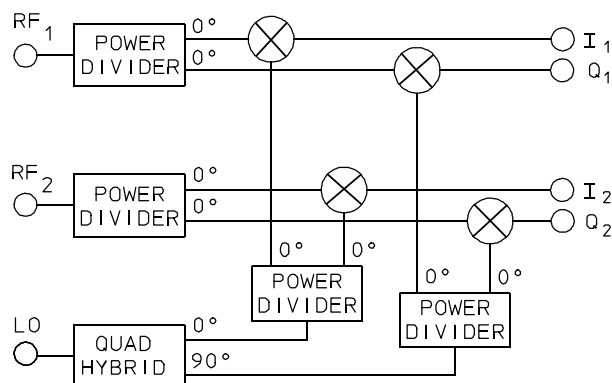
**PRINCIPAL SPECIFICATIONS**

Model Number	RF/LO Center Frequency, f_0	[†] Bandwidth MHz
IDP-2S-***B	20 to 500 MHz	10% of f_0

[†]RF and video bandwidths are typically much greater than specified.

*** Insert center frequency in MHz.

GENERAL SPECIFICATIONS**RF and LO Input Characteristics**

Impedance:	50 Ω nom.
VSWR:	1.5:1 max.
RF Power Level:	0 dBm nom.
LO Power Level	+14 dBm nom.

I & Q Output Characteristics

Video Bandwidth:	DC to [†] 50 MHz nom.
Output Impedance:	50 Ω nom.

Conversion Loss

(RF to I or Q):	10 dB typ.
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IF Balance

	12 dB max.
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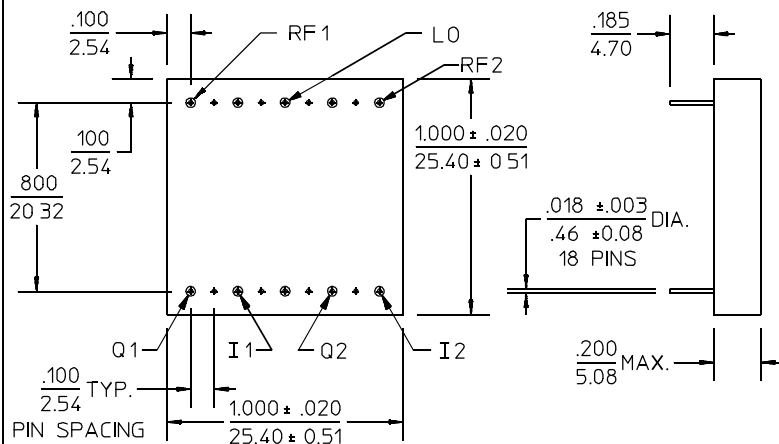
Phase:

	0 $\pm$ 5° max. (I ₁ - I ₂ or Q ₁ - Q ₂)
	90 $\pm$ 5° max. (I ₁ - Q ₁ or I ₂ - Q ₂)

Amplitude:	0.5 dB typ., 1 dB max.
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Weight, nominal: 0.35 oz (10 g)

Operating Temp: -55° to +85°C

Meri-Pac™ S-Package Outline

- NOTES:
1. Tolerance on 3 place decimals $\pm .010$ (.25 except as noted).
 2. Dimensions in inches over millimeters.
 3. Lead dimensions apply only at body.
 4. All unmarked pins are case ground.

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AVAILABLE OPTIONS

Phase Balance:	90° $\pm$ 2° max.
Amplitude Balance:	0.5 dB max.
Wider Bandwidth:	Customized units

General Notes:

1. Dual I & Q networks are integrated devices that produce two pairs of quadrature-phased, equal amplitude signals when fed by two IF signals and an LO signal as shown in the schematic above.
2. Merrimac's IDP-2S series combines two matched circuits in one package. Both lumped and distributed circuit technologies are used to minimize size and weight while maintaining excellent overall performance.
3. Merrimac's I & Q networks comply with the relevant sections of MIL-M-28837 and may be screened for compliance with additional specifications for military and space applications requiring the highest reliability.