18 TO 26 GHz DOUBLE-BALANCED MIXER

MODEL: M1826W1

FEATURES

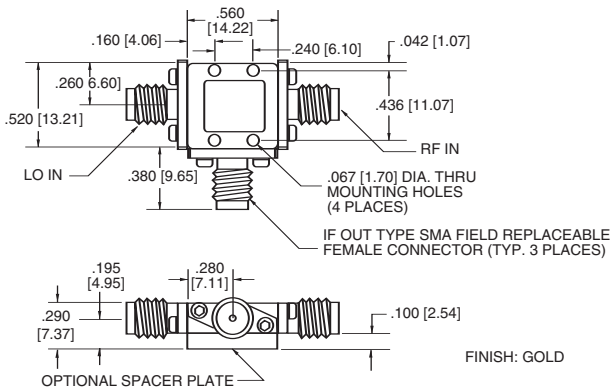
- **RF/LO coverage ..... 18 to 26 GHz**
- **IF operation ..... DC to 8 GHz**
- **Input IP^3 ..... +14 dBm**
- **LO power range ..... +10 to +15 dBm**
- **Packaging ..... Hermetically sealed**

ELECTRICAL SPECIFICATIONS

INPUT PARAMETERS	CONDITION	UNITS	MIN.	TYP.	MAX.
RF frequency range		GHz	18		26
RF VSWR	RF = -10 dBm	Ratio		2.75:1	
LO frequency range		GHz	18		26
LO power range		dBm	+10		+15
LO VSWR		Ratio		2.75:1	
TRANSFER CHARACTERISTICS	**CONDITION**	**UNITS**	**MIN.**	**TYP.**	**MAX.**
Conversion loss (IF = 1 GHz)	LO = +13 dBm	dB		9	12
Single-sideband noise figure at 25°C		dB		9.5	
LO-to-RF isolation		dB	25	35	
LO-to-IF isolation		dB	20	30	
RF-to-IF isolation		dB		20	
Input power 1 dB compression point	LO = +13 dBm	dBm		+7	
Input two-tone third-order intercept point	LO = +13 dBm	dBm		+14	
OUTPUT PARAMETERS	**CONDITION**	**UNITS**	**MIN.**	**TYP.**	**MAX.**
IF frequency range at 3 dB bandwidth	LO = +13 dBm	GHz	DC		8
IF VSWR	IF = -10 dBm	Ratio		3:1	

NOTE: Test data supplied at 25°C;
conversion loss and LO-to-RF isolation.

OUTLINE DRAWING



NOTE: All dimensions shown in brackets [ ] are in millimeters.

MAXIMUM RATINGS

Specification temperature..... +25°C
Operating temperature ..... -54 to +85°C
Storage temperature ..... -65 to +125°C

**TYPICAL SINGLE-TONE (m) RF x (n)
LO RELATIVE SPUR LEVEL (dBc)
TO REF (RF = -10 dBm, LO = +13 dBm)**

RF HARMONIC (m)					
4		>110	>110	>110
3		92	68	85
2	69	76	75	
1	REF	58		
		2	3	4

LO HARMONIC (n)

MIXER PRODUCTS