

50Ω Divide-BY-2, DC-10 GHz

Case PN: 6UDD2W6S1A2

Features:

- Divide by M: (M = 2)
- Ultra Low SSB Phase Noise -148 dBc/Hz
- Input frequency range: DC-10 GHz
- Output Power: 3dBm
- Single DC Supply: +5V
- Rugged, shielded case (SMA Connector)

Applications:

- Cellular, Satellite Communication Systems
- PCS, W-CDMA, ISM, LTE
- SDR & Ham Radio

**Electrical Specifications (Test Conditions: $T_A = +25^\circ\text{C}$, 50 Ohm System, $V_{CC} = +5\text{V}$)**

No.	Parameter	Conditions	Electrical Specification			
			MIN	TYP.	MAX	UNITS
1	Input Freq.	Sine Wave Input [1]	0.4		10	GHz
2	Input Power Range	Fin = 0.4 to 1 GHz	-5		+10	dBm
		Fin = 1 to 8 GHz	-15		+10	
		Fin = 8 to 10 GHz	-10		+2	
3	Output Power	Fin = 6 GHz	0	3		dBm
		Fin = 10 GHz	-6			dBm
4	Reverse Leakage	RF Output Terminated, Pin=0 dBm		-45		dBm
5	SSB Phase Noise (100 kHz offset)	Pin=0 dBm, Fin=6 GHz		-148		dBc/Hz
6	Output Transition Time	Pin=0 dBm, Fout=882 MHz		100		Ps
7	Supply Current (Icc)	Vcc = 5.0 V		83		mA

1. Divider will operate down to DC for square-wave input signal.

Absolute Maximum Ratings

Item	Parameter	Rating	UNITS
1	RF Input Power ($V_{CC} = +5\text{V}$)	13	dBm
2	V_{CC}	+5.5	V
3	Storage Temperature	-65 to +150	$^\circ\text{C}$
4	Operating Temperature	-40 to +85	$^\circ\text{C}$

Outline Drawing (Inch)