

Die: 3.1mmx1.45mmx0.102mm



Product Description

RFMD's SDA-2000 is a directly coupled (DC) GaAs microwave monolithic integrated circuit (MMIC) distributed driver amplifier die designed to support a wide array of high frequency commercial, military, and space applications. They are ideal for wideband amplifier gain blocks, modulators, clock drivers, broadband test equipment (ATE), Mach Zehnder Modulated (MZM) laser drivers, military, and aerospace applications.

Features

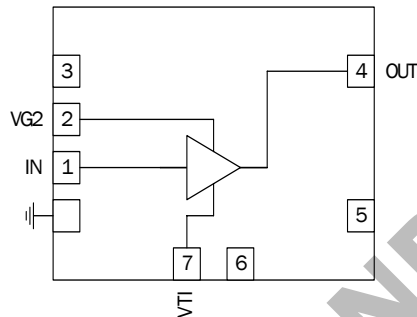
- DC to 22GHz Operation
- +28dBm P_{SAT}
- Gain = 12dB Typical
- Output Voltage to 8 V_{PP}
- 410mA Total Current

Applications

- Military
- Aerospace
- Broadband ATE
- Instrumentation
- Driver for Single-Ended (SE) MZM
- NRZ, DPSK, ODB, RZ
- Clock Driver for RZ and CS Pulse Carver

Optimum Technology Matching® Applied

- GaAs HBT
- GaAs MESFET
- InGaP HBT
- SiGe BiCMOS
- Si BiCMOS
- SiGe HBT
- GaAs pHEMT
- Si CMOS
- Si BJT
- GaN HEMT
- InP HBT
- RF MEMS
- LDMOS



Parameter	Specification			Unit	Condition
	Min.	Typ.	Max.		
Electrical Specifications					T _A = +25 °C, V _{DD} = +8V _{DC} , VG2 at = +1.5V _{DC} , I _{DD} = 410mA
Operating Frequency	DC		22	GHz	3dB BW
Gain		12		dB	
Output Voltage	4		>8	V _{P-P}	
IP3 at 10GHz		38		dBm	P _{OUT} ≅ +10dBm
P1dB at 10GHz		27		dBm	
P _{SAT} at 10GHz		28		dBm	
Noise Figure at Mid-Band		5.3		dB	
Input Return Loss	10	15		dB	
Output Return Loss	12	17			
Supply Current		410		mA	
Supply Voltage		8		V _{DC}	

*Adjust VTI between -1.5V_{DC} to +0.2V_{DC} to achieve I_{DD} = 410mA typical.

**Please contact
RFMD Technical Support
at (336) 678-5570
for more information.**

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