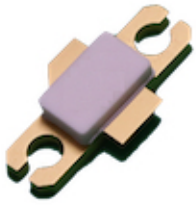


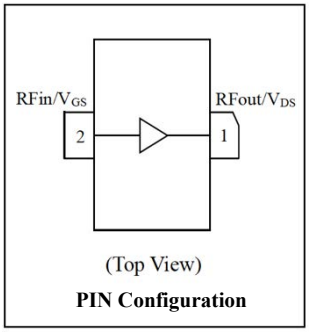
Overview

The HX0475F2 is a 75W GaN RF power amplifier operating at frequencies up to 4GHz.
It features high efficiency and high gain. This amplifier is available in a flanged package and operates with a 28V power supply.

Typical RF Performance @2500MHz [1]

- Max. Psat: 75W
- Optimal Drain Efficiency: 81%

Note 1: Freq. 2500MHz, Pulse Width 100us, Duty Cycle 10%
V_{DD}=28V, I_{DQ}=100mA



Maximum Ratings

Parameter	Symbol	Value	Unit
Max. Drain-Source Voltage	V_{DSS}	150	V
Max. Drain-Source Operating Voltage	V_{DD}	55	V
Max. Gate-Source Voltage	V_{GS}	-10	V
Max. Gate Current	I_{GMAX}	19.2	mA
Storage Temperature	T_{STG}	-65 ~ +150	℃
Max. Operating Junction Temperature	T_j	225	℃
Absolute Max. Junction Temperature	T_{MAX}	275	℃
Thermal Resistance, Channel to Base plate[2]	$R_{\theta jc}$	TBD	℃/W
Flange Temperature	T_C	-40 ~ +85	℃
Mismatch Resistance(360° undamaged)[3]	VSWR-T	10:1, TBD	/

Note 2: Thermal resistance was determined using the infrared testing method, Conditions: Pdiss = TBD, Baseplate temperature = 85°C

Note 3: Pulse width: 100 μs, Duty cycle: 10%, V_{DD} = 28V

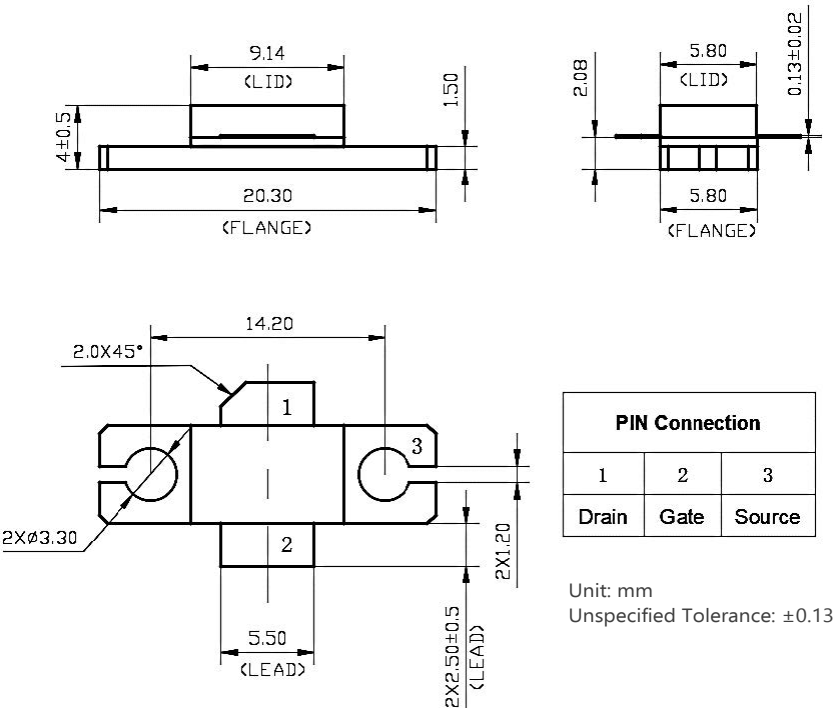
Bias Sequencing

Powering-Up	Powering-Down
Set V_{GS} to –5 V	Turn off RF Power
Apply V_{DS}	Remove V_{DS}
Increase V_{GS} until I_{DQ} reaches rated value	Remove V_{GS}
Apply RF Power	

Electrical Specifications (TC=25℃, unless otherwise specifically defined)

Parameter	Symbol	Min	Typ	Max	Unit
DC Characteristics					
Drain-Source Breakdown Voltage (V_{GS} = -10 V, I_D = 19.2 mA)	$V_{(BR)DSS}$	150	-	-	V
Gate-Source Threshold Voltage (V_{DS} = -10 V, I_D = 19.2 mA)	$V_{GS(th)}$	-4	-3.4	-1.0	V
Drain Leakage Current (V_{GS} = -10 V, V_{DS} = 150 V)	I_{DSS}	-	-	19.2	mA
Gate-Source Static Bias Voltage (V_{DD} = 28 V, I_{DQ} = 100 mA)	$V_{GS(Q)}$	-	-3.2	-	V

Package Dimensions



PIN Connection		
1	2	3
Drain	Gate	Source

Unit: mm
Unspecified Tolerance: ±0.13