

### Performance

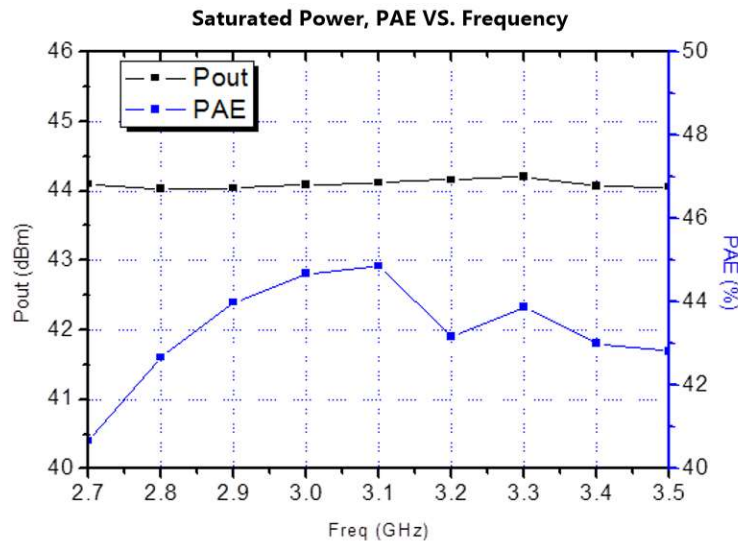
- Frequency: 2.7-3.5GHz
- Pout: 44dBm@48V
- PAE: 40% (Typ.)
- Small Signal Gain: 30dB
- Bias  $V_D=48V$ ,  $V_G=-3.0V$  (Typ.)
- Size: 18.0\*12.9\*4.7mm



### Electrical Specifications ( $V_D=48V$ , $V_G=-3V$ , F: 2.7~3.5GHz, Pulsed 100us, 15% D.C)

Symbol	Parameter	Min	Typical	Max	Unit
$G_{SS}$	Small Signal Gain @ $P_{IN}=0dBm$	-	30	-	dB
$G$	Large Signal Gain @ $P_{IN}=18dBm$	-	26	-	dB
$P_{SAT}$	Saturated Power @ $P_{IN}=18dBm$	-	44	-	dBm
$VSWR_{IN}$	Input VSWR	-	2.6	-	
PAE	Power Added Efficiency @ $P_{IN}=18dBm$	-	40		%

### Test Curves (Large signal)



### Absolute Max Ratings ( $T_A=25^\circ C$ )

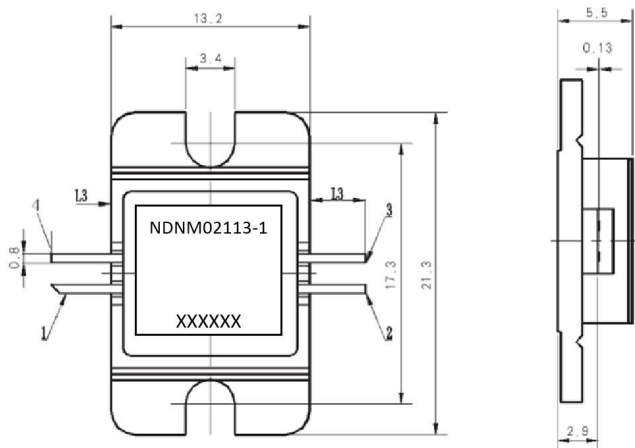
Symbol	Parameter	Value	Remark
$V_d$	Drain Voltage	60V	
$V_g$	Gate Voltage	-5V	
$P_d$	DC Power	600W	
$T_{ch}$	Channel Temperature	225°C	
$T_m$	Mounting Temperature	310°C	1min, N <sub>2</sub> protection
$T_{stg}$	Storage Temperature	-55~175°C	

Exceeding any one or combination of these limits may cause permanent damage.

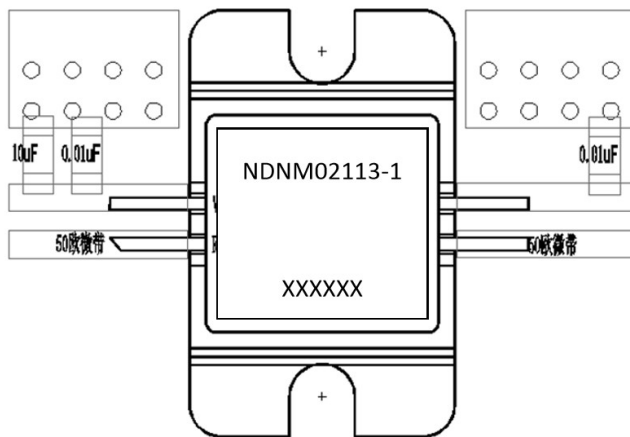
### Thermal Information

Parameter	Value	Units
Thermal Resistance ( $\theta_{jc}$ )	2.0	$^{\circ}\text{C}/\text{W}$

### Outline Size



### Application Circuit



#### Bias-up Procedure

- 1 Apply  $V_G \approx -3.0\text{V}$ (typ.)
- 2 Apply +48V to  $V_D$
- 3 Apply pulse signal generator
- 4 Turn on RF supply

#### Bias-down Procedure

- 1 Turn off RF supply
- 2 Turn off pulse signal generator
- 3 Turn off  $V_D$  supply
- 4 Turn off  $V_G$  supply