

Key Features

Frequency:	18-26.5GHz	Technology:	0.15μm GaN HEMT
Typical Small Signal Gain:	24dB	Offset:	20V, -1.8V
Typical Output:	41.5dBm	Dimension:	4.2mm×3mm×0.05mm
Typical Current:	2.8A		

Introduction

ER18265-P41 is 18-26.5GHz high power chip, it uses 0.15um GaN HEMT technology and grounded through the hole on the backside. All products are tested by 100% radio frequency. ER18265-P41 works with dual power supplies, Vds=20V, and provide 41dBm output power in 18-26.5GHz. This chip can be used in wireless communication and T/R units of microwave field.

Maximum Ratings (TA=25°C)

Symbol	Parameter	Value	Mark
Vd	Drain Voltage	28V	
Id	Drain current	4.5A	
Pd	Power Dissipation	126W	
Pin	Input Power	30dBm	
Tch	Channel Temperature	175°C	
Tm	Mounting Temperature	290°C	1min, N2 Protection
Tstg	Storage Temperature	-65~150°C	

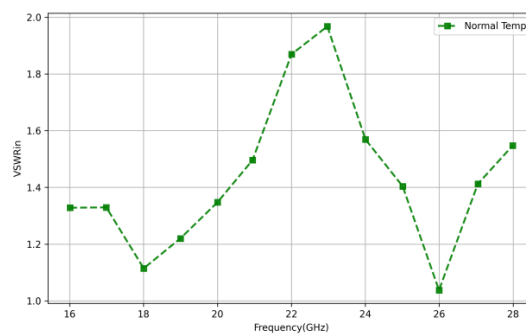
[1] Higher than any values above may cause permanent damage.

Specifications (TA=25°C)

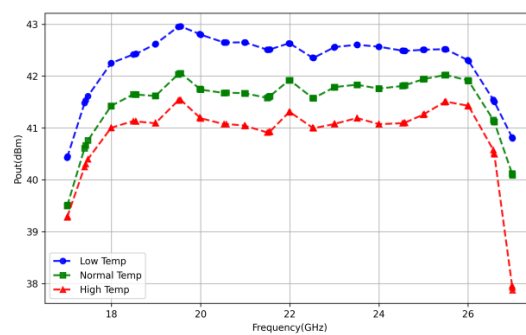
Symbol	Parameter	Test conditions	Values			Unit
			Min	Typ	Max	
G	Small Signal Gain	Vd=20V, Vg=-1.8V 18-26.5 GHz		24		dB
Gp	Power Gain			16.5		dB
Pout	Saturated Output Power			41.5		dBm
Id	Working current			2.8		A
Rth	Thermal Resistance			2.2		°C/W

Typical Performances

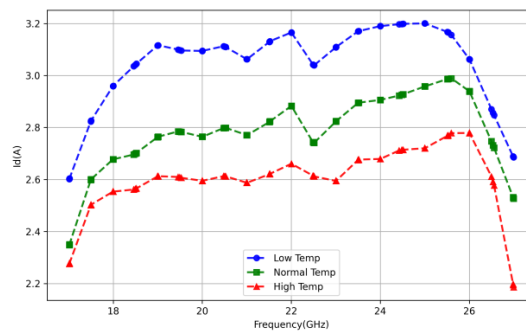
Input VSWR



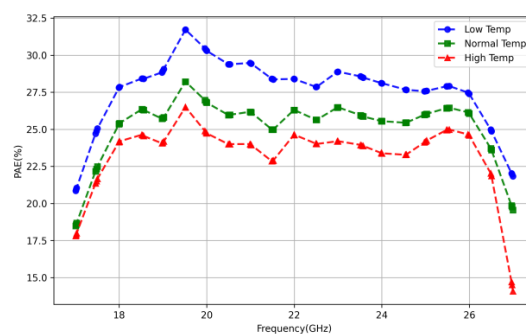
Pout



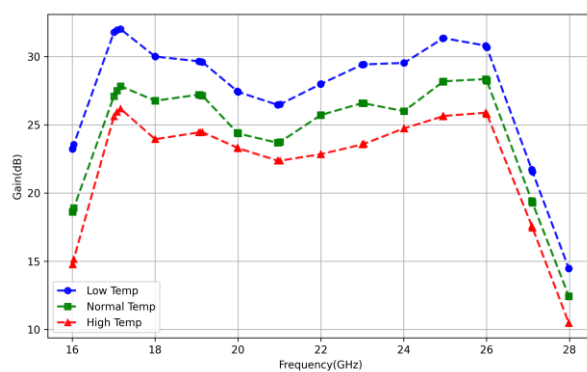
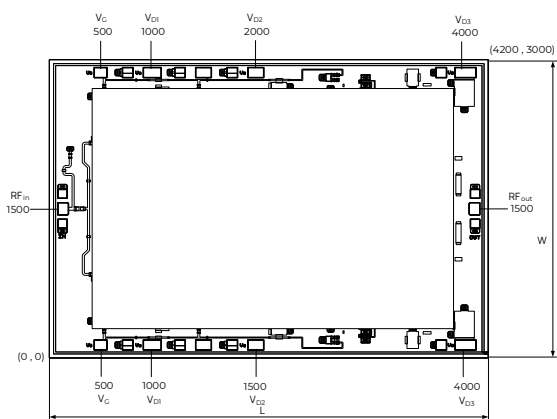
Id



PAE



Linear Gain

Chip dimension (Unit: μm)

Assemble Diagram

