



① Gate  
② Source  
③ Drain  
GD-31 (Unit: mm)

## GaAs FETs MGF1964A, MGF1961A

### Absolute Maximum Ratings (Ta=25°C)

Symbol	Parameter	Ratings		Unit	
		MGF1964A	MGF1961A	MGF1964A	MGF1961A
$V_{GDO}$	Gate to drain voltage	-10	-8	V	V
$V_{GSO}$	Gate to source voltage	-10	-8	V	V
$I_D$	Drain current	IDSS	120	mA	mA
PT	Total power dissipation	1	300	W	mW
$T_{ch}$	Channel temperature	175	175	°C	°C
$T_{stg}$	Storage temperature	-55 to +175	-55 to +175	°C	°C

### Electrical Characteristics MGF 1964A

Symbol	Parameter	Test conditions	Limits			Unit
			MIN.	TYP.	MAX.	
$V_{(BR)GDO}$	Gate to drain breakdown voltage	$I_g = -100\mu A$	-10	-15	-	V
$I_{DSS}$	Saturated drain current	$V_{GS} = 0V, V_{DS} = 3V$	105	200	400	mA
$V_{GS(off)}$	Gate to source cut-off voltage	$V_{DS} = 3V, I_D = 1mA$	-0.3	-1.4	-3.5	V
P1dB	Output Power at 1dB gain Compression	$V_{DS} = 6V, I_D = 100mA$ $f = 12GHz$	TBD	25.5	-	dBm
$G_{lp}$	Linear Power Gain	$V_{DS} = 6V, I_D = 100mA$ $f = 12GHz, Pin = -5dBm$	TBD	7	-	dB

### Electrical Characteristics MGF 1961A

Symbol	Parameter	Test conditions	Limits			Unit
			MIN.	TYP.	MAX.	
$V_{(BR)GDO}$	Gate to drain breakdown voltage	$I_g = -30\mu A$	-8	-15	-	V
$I_{DSS}$	Saturated drain current	$V_{GS} = 0V, V_{DS} = 3V$	35	60	120	mA
$V_{GS(off)}$	Gate to source cut-off voltage	$V_{DS} = 3V, I_D = 300\mu A$	-0.3	-1.4	-3.5	V
P1dB	Output Power at 1dB gain Compression	$V_{DS} = 3V, I_D = 30mA$ $f = 12GHz$	TBD	15	-	dBm
$G_{lp}$	Linear Power Gain	$V_{DS} = 3V, I_D = 30mA$ $f = 12GHz, Pin = -5dBm$	TBD	11	-	dB
$G_{lp}$	Associated gain	$V_{DS} = 3V, I_D = 10mA$	-	9	-	dB
NFmin.	Minimum noise figure	$f = 12GHz$	-	1.2	-	dB

### MGF1964A

### MGF1961A

<b>Description</b>	The MGF1964A is designed for use in S to Ku band power amplifiers.	The MGF1961A is designed for use in S to Ku band power amplifiers.
<b>Features</b>	High gain and High P1dB $G_{lp} = 7dB, P1dB = 25.5dBm$ (Typ.) @ $f = 12GHz$	High gain and High P1dB $G_{lp} = 11dB, P1dB = 15dBm$ (Typ.) @ $f = 12GHz$
<b>Application</b>	S to Ku band power Amplifiers	S to Ku band power Amplifiers
<b>Quality Grade</b>	GG	GG
<b>Recommended Bias Conditions</b>	$V_{DS} = 6V, I_D = 100mA$	$V_{DS} = 3V, I_D = 30mA$
<b>Ordering Information</b>	Tape & reel 3000pcs/reel	Tape & reel 3000pcs/reel