

Absolute Maximum Ratings¹

Parameter	Rating	Unit
Drain-Source Voltage (V_{DS}) ($-3V < V_{GS} < -0.5V$) ²	10	V
Gate-Source Voltage (V_{GS}) ($0V < V_{DS} < +10V$)	-3	V
Drain-Source Current (I_{DS}) (For $V_{DS} < 2V$)	I_{DSS}	
Gate Current (I_G) (Forward or reverse current)	10	mA
RF Input Power (P_{IN}) (Under any acceptable bias state)	20	dBm
Channel Operating Temperature (T_{CH}) (Under any acceptable bias state)	175	°C
Storage Temperature (T_{STG}) (Non-Operating Storage)	-65 to 150	°C
Total Power Dissipation (P_{TOT}) ^{3, 4, 5}	1.2	W
Simultaneous Combination of Limits ⁶ (2 or more max. limits)	80	%

Notes:

¹ $T_{AMBIENT} = 22^\circ\text{C}$ unless otherwise noted; exceeding any one of these absolute maximum ratings may cause permanent damage to the device.

²Operating at absolute maximum V_D continuously is not recommended. If operation at 10V is considered then I_{DS} must be reduced in order to keep the part within its thermal power dissipation limits. Therefore V_{GS} is restricted to $< -0.5V$.

³Total Power Dissipation to be de-rated as follows above 22°C : $P_{TOT} = 1.2 - (0.008\text{W}/^\circ\text{C}) \times T_{HS}$, where T_{HS} = heatsink or ambient temperature above 22°C . Example: For a 85°C carrier temperature: $P_{TOT} = 1.2 - (0.008 \times (85 - 22)) = 0.69\text{W}$

⁴Total Power Dissipation (P_{TOT}) defined as $(P_{DC} + P_{IN}) - P_{OUT}$, where P_{DC} : DC Bias Power, P_{IN} : RF Input Power, P_{OUT} : RF Output Power.

⁵Users should avoid exceeding 80% of 2 or more Limits simultaneously.

⁶Thermal Resistivity specification assumes a Au/Sn eutectic die attach onto an Au-plated copper heatsink or rib.



Caution! ESD sensitive device.

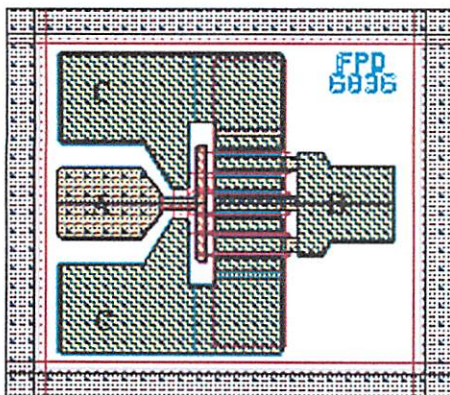
Exceeding any one or a combination of the Absolute Maximum Rating conditions may cause permanent damage to the device. Extended application of Absolute Maximum Rating conditions to the device may reduce device reliability. Specified typical performance or functional operation of the device under Absolute Maximum Rating conditions is not implied.

RoHS status based on EUDirective 2002/95/EC (at time of this document revision).

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16 x .16

Pad Layout



Pad	Description	Pin Coordinates (μm)
A	Gate Pad	90, 200
B	Drain Pad	310, 200
C	Source Pad	

Note: Coordinates are referenced from the bottom left hand corner of the die to the center of the bond pad opening.

Die Size (μm)	Die Thickness (μm)	Min. Bond Pad Opening ($\mu\text{m} \times \mu\text{m}$)
400x400	75	68x66