

POWER DISSIPATION (DFN2020-8C)

The power dissipation of the package is dependent on PCB material, layout, and environmental conditions. The following measurement conditions are based on JEDEC STD. 51-7.

Measurement Conditions

Item	Measurement Conditions
Environment	Mounting on Board (Wind Velocity = 0 m/s)
Board Material	Glass Cloth Epoxy Plastic (Four-Layer Board)
Board Dimensions	76.2 mm × 114.3 mm × 0.8 mm
Copper Ratio	Outer Layer (First Layer): Less than 95% of 50 mm Square Inner Layers (Second and Third Layers): Approx. 100% of 50 mm Square Outer Layer (Fourth Layer): Approx. 100% of 50 mm Square
Through-holes	φ 0.3 mm × 23 pcs

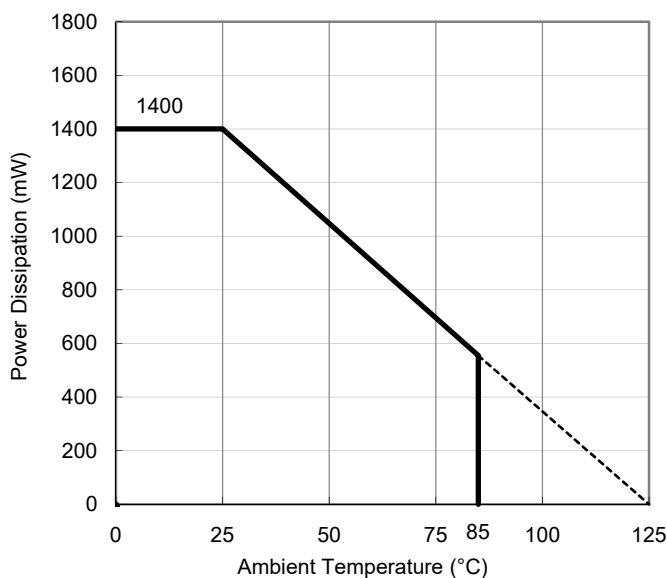
Measurement Result

(Ta = 25°C, Tjmax = 125°C)

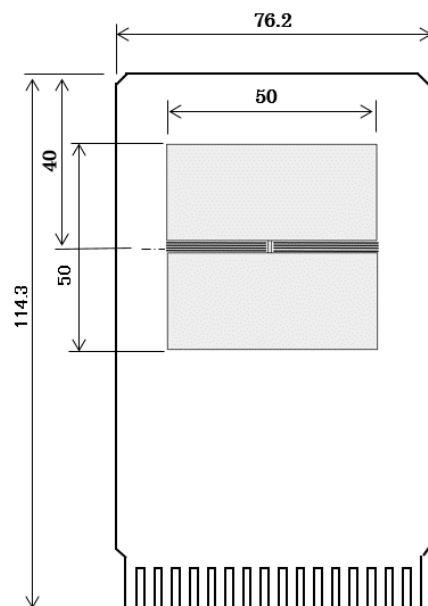
Item	Measurement Result
Power Dissipation	1400 mW
Thermal Resistance (θ_{ja})	$\theta_{ja} = 71^\circ\text{C/W}$
Thermal Characterization Parameter (ψ_{jt})	$\psi_{jt} = 34^\circ\text{C/W}$

θ_{ja} : Junction-to-Ambient Thermal Resistance

ψ_{jt} : Junction-to-Top Thermal Characterization Parameter



Power Dissipation vs. Ambient Temperature



Measurement Board Pattern

The power dissipation of the package is dependent on PCB material, layout, and environmental conditions. The following measurement conditions are based on JEDEC STD. 51-7.

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Through-holes	φ 0.3 mm × 23 pcs

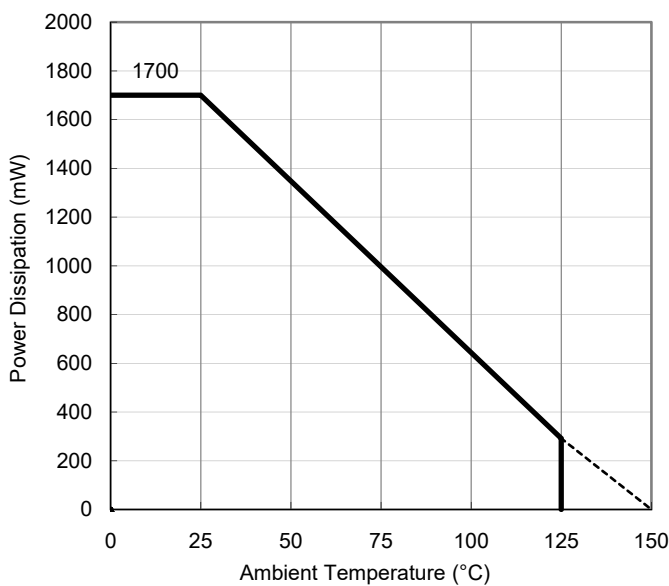
Measurement Result

(Ta = 25°C, Tjmax = 150°C)

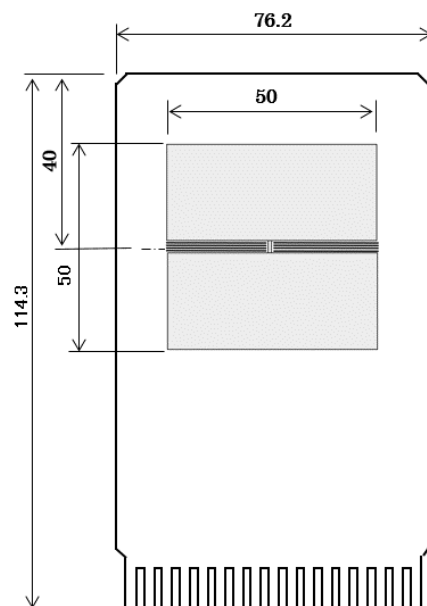
Item	Measurement Result
Power Dissipation	1700 mW
Thermal Resistance (θ_{ja})	$\theta_{ja} = 71^\circ\text{C/W}$
Thermal Characterization Parameter (ψ_{jt})	$\psi_{jt} = 34^\circ\text{C/W}$

θ_{ja} : Junction-to-Ambient Thermal Resistance

ψ_{jt} : Junction-to-Top Thermal Characterization Parameter

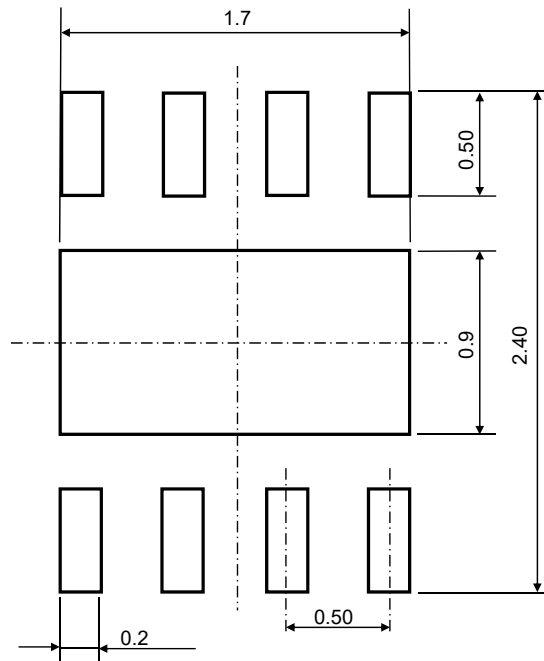


Power Dissipation vs. Ambient Temperature



Measurement Board Pattern

RECOMMENDED LAND PATTERN



(Unit: mm)