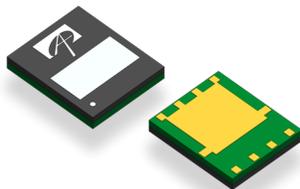


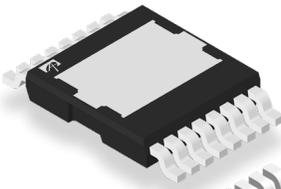


# Gallium Nitride (GaN) Transistors

Alpha and Omega Semiconductor's Gallium Nitride power transistors enable high-frequency operation, increase efficiency, and reduce system size in computing, consumer, and industrial applications. Available in voltage classes from 100V to 700V and in a broad variety of packages.



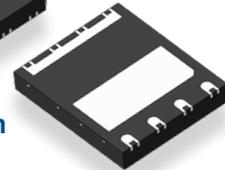
DFN5x6mm FCLGA



GTPAK™



DFN8x8mm



DPAK™



GaN  
Transistor



## Product Selection Table

Part Number	V <sub>DS</sub> (Max)	R <sub>DS(ON)</sub> max @ V <sub>GS</sub> = 5V	I <sub>D</sub> @ 25°C	Q <sub>g</sub> (nC)	Package
AOFE035V10GA1	100V	3.5 mΩ	201	7.6	LGA3.3x3.3
AOSE018V10GA1	100V	1.8 mΩ	320	22	LGA4x6 Top Exposed
AOFG018V10GA1	100V	1.8 mΩ	495	19	DFN5x6 Top Exposed
AOFG025V10GA1	100V	2.5 mΩ	310	11	DFN5x6 Top Exposed
AONS190V70GA1	700V	190 mΩ	11.5	2.8	DFN5x6
AONS140V70GA1	700V	140 mΩ	17	3.5	DFN5x6
AONV190V70GA1	700V	190 mΩ	11.5	2.8	DFN8x8
AOSE028V10GA1	100V	2.8 mΩ	80	14	LGA4x6 Top Exposed
AOSE039V15GA1	150V	3.9 mΩ	252	20	LGA4x6 Top Exposed
AONV070V65GA1	650V	70 mΩ	26	8.5	DFN8x8
AOTL035V65GA1	650V	34 mΩ	60	16	TOLL
AOTL070V65GA1	650V	70 mΩ	26	8.5	TOLL
AONV140V70GA1	700V	140 mΩ	17	3.5	DFN8x8
AOFQ018V10GA1	100V	1.8 mΩ	100	22	LGA4x6
AOFQ039V15GA1	150V	3.9 mΩ	100	20	LGA4x6
AONV240V70GA1	700V	240 mΩ	10	2	DFN8x8
AONS240V70GA1	700V	240 mΩ	10	2	DFN5x6
AOFQ070V15GA1	150V	7 mΩ	60	13	LGA4x6
AOFQ028V10GA1	100V	2.8 mΩ	80	14	LGA4x6
AONV080V65GA1	650V	80 mΩ	29	6.2	DFN8x8

## Features

- GaN-on-Silicon E-mode HEMT technology
- Industrial application
- Very low gate charge
- Ultra-low on resistance
- Very small footprint
- No Q<sub>rr</sub> (reverse recovery charge)
- Low Q<sub>g</sub> (gate charge), low Q<sub>oss</sub> (output charge)

## Applications

- High frequency DC-DC converter
- Solar Systems optimizers and microinverters
- USB PD Charger and PSU Synchronous Rectification
- Telecom Power Supply
- Motor drives
- AC/DC, DC/DC, and DC/AC converters, high density and high efficiency power conversion

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